

DEPARTMENT OF PLANNING  
STAFF REPORT

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## PLANNING COMMISSION PUBLIC HEARING

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**DATE OF HEARING: October 27, 2010**

**ZMAP 2009-0004 & SPEX 2009-0027, LUCK STONE AND LOUDOUN WATER**

**ZMAP 2009-0003, LUCK STONE QUARRY**

**ZMAP 2010-0006 EXPANSION OF THE QUARRY NOTIFICATION OVERLAY  
DISTRICT FOR LUCK STONE QUARRY "D"**

**DECISION DEADLINE: February 1, 2011**

**ELECTION DISTRICTS: Catoctin and Dulles**

**PROJECT PLANNER: Jane McCarter, AICP**

**DIRECTOR: Julie Pastor, AICP**

### EXECUTIVE SUMMARY

Luck Stone Corporation of Richmond, Virginia, and the Loudoun County Sanitation Authority (d/b/a Loudoun Water) of Ashburn, Virginia, have submitted an application (ZMAP 2009-0004) to rezone approximately 148.80 acres from the TR-10 (Transitional Residential-10) zoning district to the MR-HI (Mineral Resource-Heavy Industry) zoning district in order to permit the development of a water treatment plant and the expansion of the Luck Stone Leesburg stone quarry.

Luck Stone Corporation has also submitted an application (ZMAP 2009-0003) to rezone approximately 323.27 acres from the JLMA-20 (Joint Land Management Area-20), TR-10 (Transitional Residential-10), and PD-GI (Planned Development-General Industry) zoning districts to the MR-HI (Mineral Resource-Heavy Industry) and PD-GI (Planned Development-General Industry) zoning districts to permit the expansion of the Luck Stone Leesburg stone quarry, and an application for a Special Exception (SPEX 2009-0027) to permit stone quarrying in the proposed MR-HI zoning district.

A companion application (ZMAP 2010-0006), initiated by the Loudoun County Board of Supervisors, would amend the Zoning Map to expand the Quarry Notification (QN) Overlay District to encompass properties or portions of properties that would be located within 3,000 feet of the new quarry area if approved.

These applications are subject to the Revised 1993 Zoning Ordinance, and stone quarrying is permitted by Special Exception under Section 3-1004(J), pursuant to Sections 3-1007 and 3-1008. The subject property is located partially within the FOD (Floodplain Overlay District), partially within the QN (Quarry Notification) Overlay District-Luck Quarry and Luck Note Area, and partially within the AI (Airport Impact)

Overlay District, outside of but within one (1) mile of the Ldn 60 aircraft noise contour for the Leesburg Executive Airport. The subject property is located on the west side of the Goose Creek, south of the Town of Leesburg and the W&OD Trail, on the east side of Cochran Mill Road (Route 653), and on the north side of the Dulles Greenway (Route 267), in the Catoclin Election District.

The area is governed by the policies of the Revised General Plan (Transition Policy Area (Lower Sycolin Subarea)), the 2010 Revised Countywide Transportation Plan, and the Toll Road Plan which propose significant open space to protect the Goose Creek and Beaverdam Reservoirs and diabase quarry operations, and which designate this area for residential uses at a base density of 1 dwelling per 10 acres in a clustered pattern, with the option to rezone to a density of 1 dwelling per 3 acres in a Rural Village, and for non-residential uses that provide a transition between the Rural and Suburban Policy Areas.

## **RECOMMENDATIONS**

The proposed applications conform with the land use and mineral extraction policies of the Revised General Plan. Staff can support approval of the Zoning Map Amendment Petitions based on the Findings in the October 27, 2010 Staff Report and subject to attached proffers. Staff can support approval of the Special Exception subject to agreement upon revised Conditions of Approval and based on the Findings in the October 27, 2010 Staff Report. Staff recommends that the Planning Commission forward these applications to the appropriate committee for further discussion to finalize details of proffers and special exception conditions.

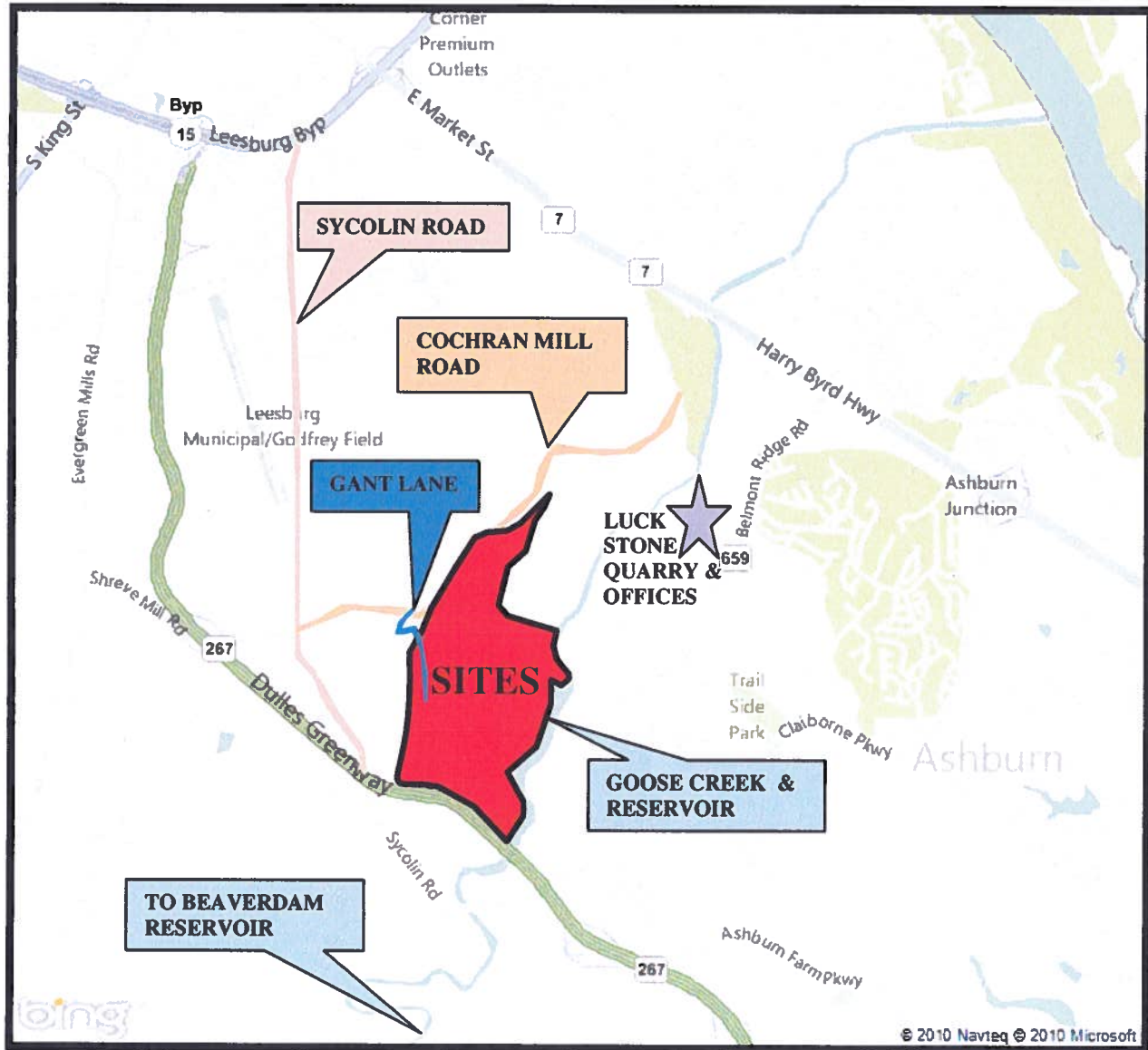
## **SUGGESTED MOTIONS**

1. I move that the Planning Commission forward ZMAP-2010-0006, Expansion Of The Quarry Notification Overlay District For Luck Stone Quarry "D", and ZMAP 2009-0004, Luck Stone and Loudoun Water, and ZMAP 2009-0003, Luck Stone, and SPEX 2009-0027, Luck Stone Quarry, to worksession for further review.

Or

2. I move an alternate motion.

## VICINITY MAP

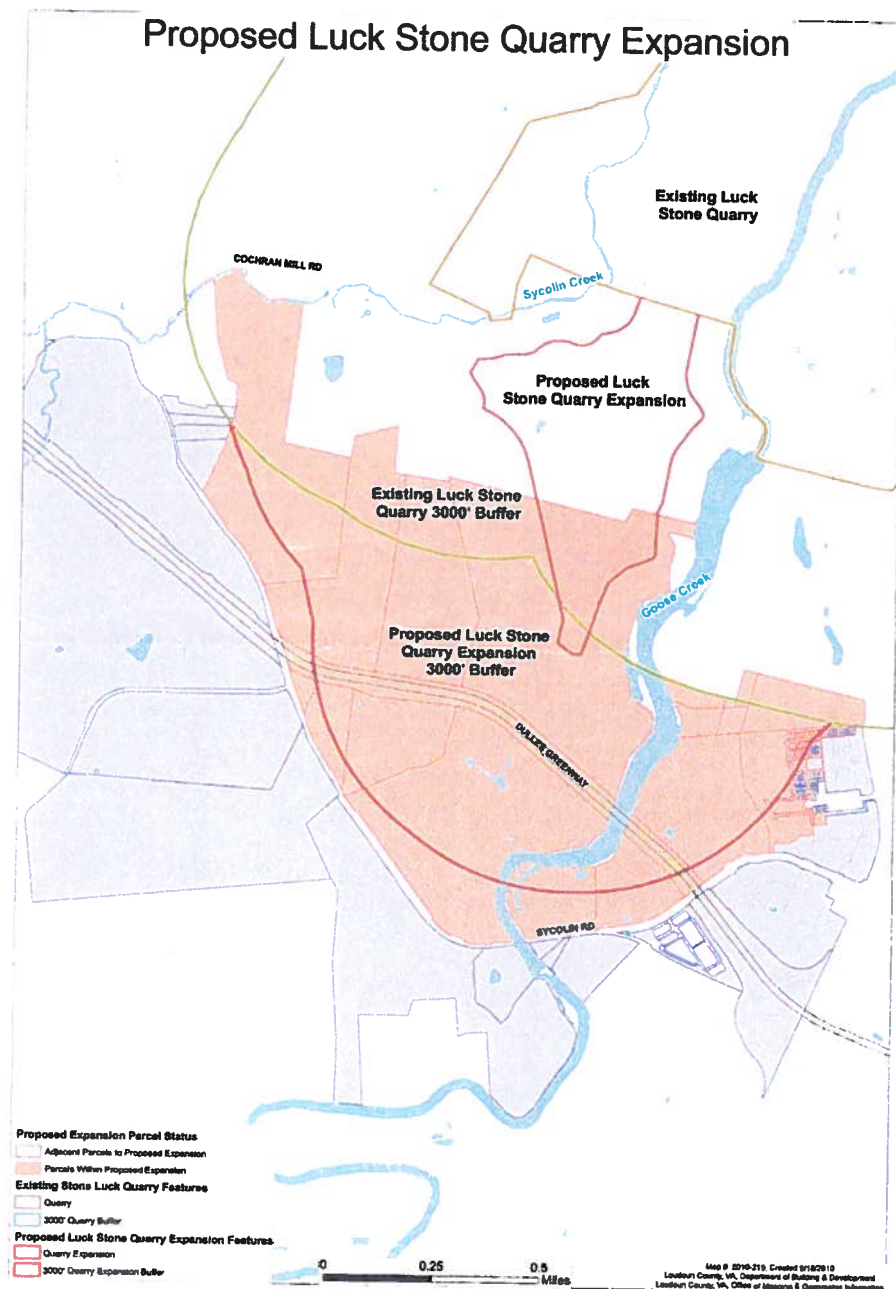


### Directions:

From Leesburg, take Sycolin Road south past the Leesburg Executive Airport. Turn left onto Cochran Mill Road, then proceed approximately 0.75 miles to Gant Lane on the right. Sites are on the east (left) side of Cochran Mill Road both north and south of Gant Lane and may be accessed from Gant Lane.

## QUARRY NOTIFICATION AREA MAP

The area proposed to be included in the expanded Quarry notification (QN) Overlay District is located generally to the east, south and west of the existing Luck Stone Quarry "D" (as depicted below) and includes all or portions of 117 parcels within 3,000 feet of the limits of the new quarry area.



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## **I. APPLICATION INFORMATION –**

**APPLICANT 1:** Loudoun County Sanitation Authority (Loudoun Water)  
Dale C. Hammes, General Manager  
44865 Loudoun Water Way  
Ashburn, VA 20146  
571-291-7700  
[dhammes@loudounwater.org](mailto:dhammes@loudounwater.org)

**REPRESENTATIVE 1:** McGuire Woods, LLP  
Jonathan P. Rak, Attorney  
1750 Tysons Boulevard, Suite 1800  
McLean, VA 22102-4215  
703-712-5411  
[jrak@mcguirewoods.com](mailto:jrak@mcguirewoods.com)

**APPLICANT 2:** Luck Stone Corporation  
Mark Vigil, Manager  
P.O.Box 29682  
Richmond, VA 23242  
800-898-5825  
[mvigil@luckstone.com](mailto:mvigil@luckstone.com)

**REPRESENTATIVE 2:** Walsh, Colucci, Lubeley, Emrich, & Walsh PC  
J. Randall Minchew, Esquire and William J. Keefe, AICP  
One East Market Street  
Leesburg, VA 20176  
703-737-3633  
[jrminchew@ldn.thelandlawyers.com](mailto:jrminchew@ldn.thelandlawyers.com)  
[wkeefe@ldn.thelandlawyers.com](mailto:wkeefe@ldn.thelandlawyers.com)

**APPLICANT 3:** Loudoun County Board of Supervisors  
Scott K. York, Chairman  
1 Harrison Street, S.E., 5<sup>th</sup> Floor  
P.O.Box 7000  
Leesburg, VA 20177-7000  
[Scott.York@loudoun.gov](mailto:Scott.York@loudoun.gov)

**PROPOSAL:** **Zoning Map Amendment Petitions** rezoning of approximately 472.07 acres from JLMA-20 (Joint Land Management Area-20), TR-10 (Transitional Residential – 10), PD-GI (Planned Development-General Industry) and MR-HI (Mineral Resource-Heavy Industry) to PD-GI (Planned Development-General Industry) and MR-HI (Mineral Resource-Heavy Industry).

ZMAP 2009-0003, ZMAP 2009-0004, ZMAP 2010-0006, and SPEX 2009-0027  
**LUCK STONE AND LOUDOUN WATER**  
Planning Commission Public Hearing  
October 27, 2010

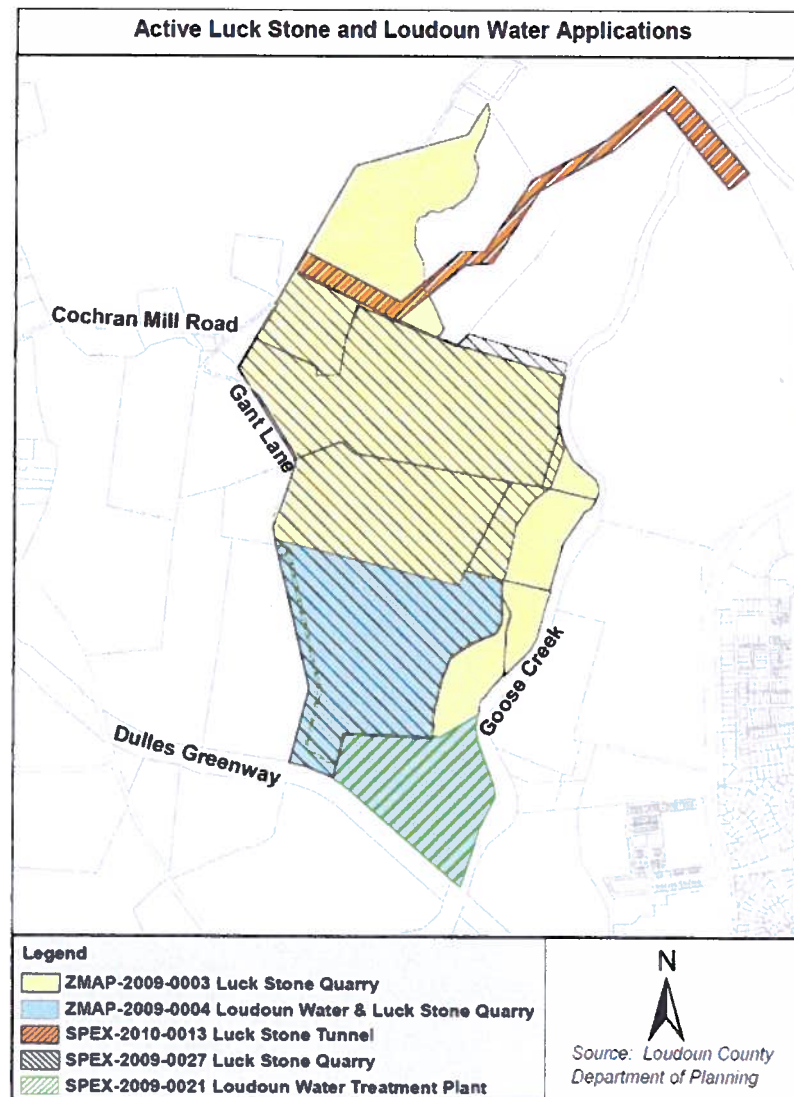
**Special Exception** to permit quarry uses on approximately 251.27 acres in the proposed MR-HI district.

**Zoning Map Amendment Petition** to expand the existing QN district around the proposed special exception for quarry use areas.

Applications accepted on September 2, 2009.

**LOCATION:**

The properties are located within that area west of Goose Creek, north of Dulles Greenway, east of Cochran Mill Road and south of existing Luck Stone quarry lands south of the W&OD Trail. See Map below.





**ZMAP 2009-0003, ZMAP 2009-0004, ZMAP 2010-0006, and SPEX 2009-0027  
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The QN area includes all parcels within 3,000 feet of any property approved for quarrying operations. See Map on Page 4.

**TAX MAP/PARCELS: ZMAP 2009-0003; ZMAP 2009-0004; AND SPEX 2009-0027:**

| <b>TAX MAP NUMBER</b> | <b>PIN#</b> | <b>LAND DEVELOPMENT APPLICATION</b> | <b>AREA OF LAND DEVELOPMENT APPLICATION</b> |
|-----------------------|-------------|-------------------------------------|---|
| /61/////////8/        | 151-16-0598 | ZMAP-2009-0003                      | 81.50 acre portion of a 137.03 acre parcel  |
|                       |             | SPEX-2009-0027                      | 20.15 acre portion of a 137.03 acre parcel  |
| /61/////////9A        | 152-26-8334 | ZMAP-2009-0003                      | 26.87 acres                                 |
|                       |             | SPEX-2009-0027                      | 9.96 acre portion of a 26.87 acre parcel    |
| /61/////////10/       | 152-36-1675 | ZMAP-2009-0003                      | 116.27 acres                                |
|                       |             | SPEX-2009-0027                      | 116.27 acres                                |
| /61/////////20A       | 152-16-8431 | ZMAP-2009-0003                      | 3.60 acres                                  |
| /61/////////9/        | 152-25-5356 | ZMAP-2009-0003                      | 69.92 acres                                 |
|                       |             | SPEX-2009-0027                      | 69.92 acres                                 |
| /61/////////9B        | 152-27-4798 | ZMAP-2009-0003                      | 5.54 acres                                  |
| /61/////////15/       | 153-35-5865 | ZMAP-2009-0003                      | 19.57 acre portion of a 168.37 acre parcel  |
|                       |             | ZMAP 2009-0004                      | 148.80 acre portion of a 168.37 acre parcel |
|                       |             | SPEX-2009-0027                      | 98.87 acre portion of a 168.37 acre parcel  |
| /61/////////6/        | 151-37-7403 | SPEX-2009-0027                      | 6.02 acre portion of a 148.41 acre parcel   |

**ZMAP 2010-0006: (WITH QUARRY NOTIFICATION OVERLAY DISTRICT)**

| <b>PIN#</b> | <b>TAX MAP NUMBER</b> | <b>PARCEL ADDRESS</b>                |
|-------------|-----------------------|--------------------------------------|
| 153-16-3488 | /78//88////D/         | 20810 SYCOLIN RD ASHBURN, VA 20148   |
| 153-27-7697 | /78//86////A/         | 42660 GENERATION DR ASHBURN VA 20147 |
| 153-28-1473 | /78//90////M/         | N/A                                  |
| 153-28-1483 | /78//90////J/         | 42729 REDPATH TE ASHBURN VA 20147    |
| 153-28-1659 | /78/F/1///88/         | 42715 KEILLER TE ASHBURN VA 20147    |
| 153-28-1750 | /78/F/1///104/        | 42720 TUNSTALL TE ASHBURN VA 20147   |
| 153-28-1959 | /78/F/1///89/         | 42717 KEILLER TE ASHBURN VA 20147    |
| 153-28-2050 | /78/F/1///105/        | 42722 TUNSTALL TE ASHBURN VA 20147   |
| 153-28-2120 | /78//91///166/        | 42721 STRALOGH TE ASHBURN VA 20147   |
| 153-28-2160 | /78/F/1///90/         | 42719 KEILLER TE ASHBURN VA 20147    |
| 153-28-2251 | /78/F/1///106/        | 42724 TUNSTALL TE ASHBURN VA 20147   |
| 153-28-2360 | /78/F/1///91/         | 42721 KEILLER TE ASHBURN VA 20147    |
| 153-28-2451 | /78/F/1///107/        | 42726 TUNSTALL TE ASHBURN VA 20147   |
| 153-28-2560 | /78/F/1///92/         | 42723 KEILLER TE ASHBURN VA 20147    |



**ZMAP 2009-0003, ZMAP 2009-0004, ZMAP 2010-0006, and SPEX 2009-0027  
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|             |                |   |
|-------------|----------------|---|
| 153-28-2636 | /78/F/1////R/  | N/A                                     |
| 153-28-2651 | /78/F/1///108/ | 42728 TUNSTALL TE ASHBURN VA 20147      |
| 153-28-2760 | /78/F/1///93/  | 42725 KEILLER TE ASHBURN VA 20147       |
| 153-28-2851 | /78/F/1///109/ | 42730 TUNSTALL TE ASHBURN VA 20147      |
| 153-28-2960 | /78/F/1///94/  | 42727 KEILLER TE ASHBURN VA 20147       |
| 153-28-3052 | /78/F/1///110/ | 42732 TUNSTALL TE ASHBURN VA 20147      |
| 153-28-3161 | /78/F/1///95/  | 42729 KEILLER TE ASHBURN VA 20147       |
| 153-28-3252 | /78/F/1///111/ | 42734 TUNSTALL TE ASHBURN VA 20147      |
| 153-28-3423 | /78/91////P/   | N/A                                     |
| 153-28-3461 | /78/F/1///96/  | 42733 KEILLER TE ASHBURN VA 20147       |
| 153-28-3552 | /78/F/1///112/ | 42738 TUNSTALL TE ASHBURN VA 20147      |
| 153-28-3761 | /78/F/1///97/  | 42735 KEILLER TE ASHBURN VA 20147       |
| 153-28-3815 | /78/86////C/   | N/A                                     |
| 153-28-3962 | /78/F/1///98/  | 42737 KEILLER TE ASHBURN VA 20147       |
| 153-28-4162 | /78/F/1///99/  | 42739 KEILLER TE ASHBURN VA 20147       |
| 153-28-5147 | /78/F/1////Q/  | N/A                                     |
| 153-35-5865 | /61////////15/ | N/A                                     |
| 153-36-9846 | /61////////19/ | 42649 HEARFORD LA ASHBURN VA 20147      |
| 153-37-0418 | /61////////18/ | N/A                                     |
| 153-37-4519 | /61////////18A | N/A                                     |
| 153-37-6062 | /61////////17/ | N/A                                     |
| 153-38-1472 | /78/F/1///23/  | 42714 KEILLER TE ASHBURN VA 20147       |
| 153-38-1772 | /78/F/1///24/  | 42716 KEILLER TE ASHBURN VA 20147       |
| 153-38-1972 | /78/F/1///25/  | 42718 KEILLER TE ASHBURN VA 20147       |
| 153-38-2172 | /78/F/1///26/  | 42720 KEILLER TE ASHBURN VA 20147       |
| 153-38-2473 | /78/F/1///27/  | 42722 KEILLER TE ASHBURN VA 20147       |
| 153-38-2673 | /78/F/1///28/  | 42724 KEILLER TE ASHBURN VA 20147       |
| 153-38-2873 | /78/F/1///29/  | 42726 KEILLER TE ASHBURN VA 20147       |
| 153-38-3174 | /78/F/1///30/  | 42728 KEILLER TE ASHBURN VA 20147       |
| 153-38-3574 | /78/F/1///31/  | 42734 KEILLER TE ASHBURN VA 20147       |
| 153-38-3774 | /78/F/1///32/  | 42736 KEILLER TE ASHBURN VA 20147       |
| 153-38-4075 | /78/F/1///33/  | 42738 KEILLER TE ASHBURN VA 20147       |
| 153-38-4275 | /78/F/1///34/  | 42740 KEILLER TE ASHBURN VA 20147       |
| 153-38-4575 | /78/F/1///35/  | 42742 KEILLER TE ASHBURN VA 20147       |
| 153-38-4775 | /78/F/1///36/  | 42744 KEILLER TE ASHBURN VA 20147       |
| 153-38-4976 | /78/F/1///37/  | 42746 KEILLER TE ASHBURN VA 20147       |
| 153-38-5276 | /78/F/1///38/  | 42748 KEILLER TE ASHBURN VA 20147       |
| 153-38-5282 | /78/F/1////S/  | N/A                                     |
| 153-38-5576 | /78/F/1///39/  | 42752 KEILLER TE ASHBURN VA 20147       |
| 153-48-3134 | /61////////21/ | 20521 BELMONT RIDGE RD ASHBURN VA 20147 |
| 154-45-5373 | /78////////3/  | 20776 SYCOLIN RD ASHBURN VA 20148       |
| 193-27-9018 | /60////////41/ | N/A                                     |

**ZMAP 2009-0003, ZMAP 2009-0004, ZMAP 2010-0006, and SPEX 2009-0027  
LUCK STONE AND LOUDOUN WATER  
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|                 |                   |  |
|-----------------|-------------------|--|
| 194-19-9296     | /61/////////16/   | 20632 SYCOLIN RD LEESBURG VA 20175     |
| 194-29-3793     | /61/////////16A   | N/A                                    |
| 194-38-5006     | /60/////////40/   | N/A                                    |
| 194-48-6020     | /60/////////39/   | N/A                                    |
| 194-49-8227     | /61/////////13/   | N/A                                    |
| 234-37-8457-001 | /60/////////7BTR1 | 41660 SHREVE MILL RD LEESBURG VA 20175 |
| 234-37-8457-002 | /60/////////7BTR2 | N/A                                    |

**SURROUNDING LAND USES/ZONING OF THE COMBINED ZMAP 2009-0003,  
ZMAP 2009-0004 AND SPEX 2009-0027 APPLICATIONS:**

|              | <u><b>ZONING</b></u>                       | <u><b>PRESENT LAND USES</b></u>   |
|--------------|--|---|
| <b>NORTH</b> | MR-HI<br>PD-GI<br>JLMA-20/MR-HI<br>JLMA-20 | existing Quarry D Luck Stone<br>vacant Luck Stone<br>vacant Woodpecker and<br>existing Philip A. Bolen Memorial Park                              |
| <b>SOUTH</b> | MR-HI<br>TR-10<br>TR-10                    | existing Quarry D Luck Stone<br>existing Single Family Wildwood Farm<br>existing Dulles Greenway  |
| <b>EAST</b>  | MR-HI<br>PD-IP<br><br>PD-GI                | existing Quarry B Luck Stone<br>vacant City of Fairfax<br>existing single family Goose Creek Commercial<br>vacant City of Fairfax and Goose Creek |
| <b>WEST</b>  | JLMA-20<br><br>TR-10                       | existing Philip A. Bolen Memorial Park;<br>vacant Northern Virginia Electric Co-op<br>vacant LTI Properties,<br>vacant John Andrews               |

**SURROUNDING LAND USES/ZONING OF ZMAP 2010-0006 QN APPLICATION:**

|              | <u><b>ZONING</b></u>    | <u><b>PRESENT LAND USES</b></u>                     |
|--------------|-------------------------|---|
| <b>NORTH</b> | MR-HI<br>TR-10<br>PD-IP | existing Quarry D Luck Stone<br>vacant<br>vacant    |
| <b>SOUTH</b> | TR-10<br>R1<br>PD-H4    | vacant and farm<br>existing single family<br>vacant |

|             |         |                          |
|-------------|---------|--------------------------|
| <b>EAST</b> | PD-GI   | vacant City of Fairfax   |
|             | PD-OP   | vacant                   |
|             | PD-IP   | vacant and single family |
|             | R16     | vacant                   |
|             | PD-CCCC | Goose Creek Retail       |
| <b>WEST</b> | TR-10   | vacant                   |

## II. SUMMARY OF DISCUSSION

Staff and the Applicant have had detailed discussions regarding the issues associated with each of the applications. Verbal understanding and clarity of the comments and proposed Applicant responses has been achieved. However, submission of plats, responses, and revised conditions and proffer statements was received October 7, 2010. Staff has not had the opportunity to review the October 7, 2010 submissions therefore the issues outstanding in the summary table below may be significantly addressed. Staff will provide an update to the application at the public hearing.

| <b>Topic</b>              | <b>Issues Reviewed and Status</b>  |
|---------------------------|--|
| <b>Comprehensive Plan</b> | <ul style="list-style-type: none"> <li>• Consistency with the <u>Revised General Plan</u> land use and mineral extraction policies. Status: RESOLVED. The rezoning and special exception applications are consistent with the land use and mineral extraction policies of the <u>Revised General Plan</u>.</li> <li>• Green infrastructure impacts with quarry extension. Status: RESOLVED. Conditions proposed are consistent with the green infrastructure policies of the <u>Revised General Plan</u>.</li> <li>• Depiction of the 300' no-build buffer to protect river and stream corridor resources. Status: RESOLVED: ZMAP CDP and SPEX Plat show the 300' buffer.</li> <li>• 300' no build buffer Goose Creek uses. Status: <b>ISSUE proffer revisions regarding use and encroachments needed.</b></li> <li>• PD-GI lands kept as open space. Status: <b>ISSUE plat and proffer revisions needed.</b></li> <li>• MR-HI areas between Sycolin Creek and Cochran Mill Road to remain open space. Status: <b>ISSUE: SPEX 2010-0013 shows access road through open space; relocate stormwater treatment areas out of stream buffer; limit uses; remove encroachments; proffers and conditions revisions proposed.</b></li> <li>• Stabilize disturbed areas with native vegetation, trees, berms, or shrubs. Status: RESOLVED. Condition requiring re-vegetating berm areas adjacent to quarry use.</li> <li>• Clarification of permitted accessory uses associated with quarrying</li> </ul> |

ZMAP 2009-0003, ZMAP 2009-0004, ZMAP 2010-0006, and SPEX 2009-0027  
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|                                  |   |
|----------------------------------|---|
|                                  | <p>activities. <b>Status: ISSUE proffer revisions needed.</b></p> <ul style="list-style-type: none"> <li>• Provision of open space. <b>Status: ISSUE plat and proffer revisions needed.</b></li> <li>• Development of a concept plan for use of the quarry following cessation of use. <b>Status: ISSUE proffer revisions needed.</b></li> <li>• Lighting and operational standards. Status: RESOLVED with a proffer.</li> </ul>  |
| <i>Zoning</i>                    | <ul style="list-style-type: none"> <li>• Staff recommends a 20-year period of validity for the quarry opening. Status: RESOLVED with a condition that enables adequate time for the quarry use to begin.</li> <li>• Staff recommends a unified special exception to supercede both SPEX 1990-0019 and SPEX 1999-0006 and to include SPEX 2009-0027 to provide the clarity of a single plat and set of conditions addressing overlapping quarry project areas. <b>Status: ISSUE condition proposed.</b></li> <li>• Rezoning plat needed for non PD portion in addition to CDP provided for ZMAP 2009-0004. <b>Status: ISSUE plat, proffer revisions needed.</b></li> </ul>   |
| <i>Parks</i>                     | <ul style="list-style-type: none"> <li>• Coordinate with PRCS for opportunities to develop a trail network along the Goose Creek. <b>Status: ISSUE regarding dedication, maintenance, location, encroachments, timing require proffer and condition revisions.</b></li> <li>• Coordinate with PRCS for opportunities to develop a trail network along the Sycolin Creek. <b>Status: ISSUE regarding dedication, maintenance, location, encroachments, reforestation and plan, timing require proffer and condition revisions.</b></li> <li>• Coordinate with PRCS and Loudoun Water to provide a future public recreational amenity following quarry cessation. <b>Status: ISSUE condition proposed.</b></li> </ul>       |
| <i>Historic/<br/>Archaeology</i> | <ul style="list-style-type: none"> <li>• Identify archaeological sites. Status: RESOLVED. The 4 sites are not National Register eligible and do not warrant further investigation.</li> </ul>   |
| <i>Environmental<br/>Review</i>  | <ul style="list-style-type: none"> <li>• Protection of water quality and habitat in the Goose Creek. Status: RESOLVED with condition.</li> <li>• Earthen berm surrounding quarry. Status: RESOLVED with a proffer.</li> <li>• Turbidity testing for Goose Creek. RESOLVED with a condition.</li> <li>• Wood turtle habitat. Status: RESOLVED with a condition.</li> <li>• Riparian Buffer to restore degraded stream channel and enhance forest along Sycolin Creek. Status: RESOLVED with a proffer.</li> <li>• Remove low water crossing at Sycolin Creek. <b>Status: ISSUE with condition timing.</b></li> <li>• No outfalls to occur upstream of Goose Creek reservoir. Status: RESOLVED with a condition.</li> </ul> |

ZMAP 2009-0003, ZMAP 2009-0004, ZMAP 2010-0006, and SPEX 2009-0027  
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|                                   |  |
|-----------------------------------|--|
| <i>Emergency Services</i>         | <ul style="list-style-type: none"> <li>• Demonstrate adequate access and circulation of emergency vehicles throughout the site at the time of site plan. Status: RESOLVED. Applicant will demonstrate this circulation at site plan.</li> <li>• Contribution to the primary volunteer fire and rescue agencies. Status: RESOLVED. Applicant has agreed to this contribution through a proffer and a note on the conditions consistent with policy.</li> </ul>  |
| <i>Transportation</i>             | <ul style="list-style-type: none"> <li>• Provide safe and adequate access to the site, including during construction. Status: RESOLVED with conditions.</li> <li>• Limit locations of construction vehicle access and internally quarried rock transport. Status: RESOLVED with conditions.</li> <li>• Cochran Mill Road 35 feet ROW dedication. Status: RESOLVED with proffers.</li> <li>• Gant Lane 25 feet ROW dedication. Status: RESOLVED with proffers.</li> <li>• Gant Lane timing and construction of terminus <b>Status: ISSUE proffer revisions needed.</b></li> <li>• Turn lanes from Belmont Ridge Road. <b>Status: ISSUE condition revisions needed.</b></li> <li>• Traffic signal at Route 659 at Luck Lane intersection. RESOLVED with conditions.</li> </ul> |
| <i>Disclosure of Real Parties</i> | <ul style="list-style-type: none"> <li>• Received, signed September 28, 2010.</li> </ul>   |

| <b>APPLICABLE POLICY OR ORDINANCE SECTION</b>   |
|---|
| <p><u>Revised General Plan</u><br/> Chapter 2: Planning Approach/Infrastructure/General Water and Wastewater Policies.<br/> Chapter 3: Fiscal Planning and Public Facilities; Parks, recreation and Community Services.<br/> Chapter 5: Green Infrastructure/Environmental, Natural, and Heritage Resources; Mineral Resource Extraction Policies; River and Stream Corridor Resources Map and Policies; Scenic River and Potomac River Policies; Surface Water Policies; Groundwater Policies; Forest, Trees and Vegetation Policies; Plant and Wildlife Habitat Policies; Historic and Archaeological Resources Policies; Greenways and Trails; Lighting and Night Sky; Aural Environment<br/> Chapter 6: Green Infrastructure<br/> Chapter 7: Planned Land Use Map.<br/> Chapter 8: Transition Policy Area; General Policies; Community Design Policies; Land Use Pattern; Lower Sycolin and Middle Goose Subareas;<br/> Chapter 11: Transition Policy Area Design Guidelines.</p> |
| <p><u>Heritage Preservation Plan</u><br/> Chapter 2: Archaeological Resources.</p>  |
| <p><u>Revised Countywide Transportation Plan</u><br/> Chapter 1: Transportation Strategy and Goals.</p>   |
| <p><u>Bicycle and Pedestrian Master Mobility Plan</u></p>   |
| <p><u>Revised 1993 Zoning Ordinance</u><br/> Section 2-1400 TR-10 (Transitional Residential - 10).<br/> Section 3-1001 and 3-1002, Special Exception Uses MR-HI districts.<br/> Section 3-1004, Special Exception Uses<br/> Section 4-1402 AI – Airport Impact Overlay District<br/> Section 4-1500 FOD - Floodplain Overlay District.<br/> Section 4-1800 QN - Quarry Notification Overlay District<br/> Section 5-1504 Light and Glare Standards.<br/> Section 5-1507 Noise Standards.<br/> Section 5-1508 Steep Slope Standards.<br/> Section 6-1300 Special Exception.<br/> Section 6-1313 Period of Validity. .<br/> Article 8, Definitions.</p>   |
|   |

### III. FINDINGS

#### **ZMAP 2009-0003, ZMAP 2009-0004, SPEX 2009-0027**

1. The proposed rezonings and special exception are consistent with the land use and mineral extraction policies of the Revised General Plan (RGP). As an interim use the proposal provides a transition in land development intensity between suburban development in the east and rural development in the west.
2. The proposed rezoning and special exception comply with the Revised 1993 Zoning Ordinance.

#### **ZMAP 2010-0006**

1. The proposed rezoning to expand the Quarry Notification (QN) Overlay District is consistent with relevant policies of the Revised General Plan.
2. The proposed rezoning complies with the Quarry notification (QN) Overlay District regulations of the Revised 1993 Zoning Ordinance.

### IV. DRAFT CONDITIONS OF APPROVAL      **SEPTEMBER 28, 2010**

Note: The Applicant has also submitted proposed conditions of approval which are included in the packet in Attachment 282. Staff and the Applicant continue to discuss condition language.

1. Substantial Conformance: The approved Special Exception Use, a quarry use, shall be developed in substantial conformance with the Special Exception Plat, consisting of eight (8) sheets dated July 31, 2009, as revised through August 26, 2010, and prepared by Dewberry & Davis LLC. (the "SPEX Plat"), subject to these conditions of approval. Approval of this application for the portion of Tax Maps # /61/////////6;/ /61/////////8;/ /61/////////9;/ /61/////////9A; /61/////////10;/ and /61/////////15/ (PINS # 151-37-7403, 151-16-0598, 152-25-5356; 152-26-8334, 152-36-1675 and 153-35-5865, respectively) lying within the SPEX LIMITS as delineated and labeled on the SPEX Plat (the "Property") shall not relieve the Applicant or the owners of the Property from the obligation to comply with and conform to any Zoning Ordinance, Codified Ordinance, or applicable requirement. As used in these conditions, "Applicant" includes the owner of the Property subject to this Special Exception approval, its successors, and parties developing, establishing or operating the approved Special Exception Use.
2. Previous Special Exceptions: The approved Special Exception shall incorporate the areas uses and conditions of SPEX 1990-0019; SPEX 1999-0006; and SPEX 2010-0013. These conditions of approval for SPEX 2009-0027, shall coordinate a unified approach to the overlapping special exception projects.



3. Period of Validity: The period of validity, set forth in Section 6-1313 of the Revised 1993 Loudoun County Zoning Ordinance, for this Special Exception approval shall be twenty (20) years. Such period of validity may be extended for good cause shown, provided that an application is submitted to the Board of Supervisors a minimum of thirty (30) days before the expiration date.
4. Buffer Preservation: No clearing or grading associated with the proposed quarry, approach roads or temporary construction access shall be permitted within the minimum 300-foot setback along the Goose Creek, the Scenic Creek valley buffer or the 50' stream buffer as shown on the SPEX plat. Further all disturbance activities will avoid designated wetland and steep slope areas.
5. Goose Creek Scenic Creek Buffer: The Applicant shall dedicate a 300 foot buffer area along the entire property frontage with Goose Creek prior to obtaining a zoning permit for the project. This buffer area shall be dedicated as permanent open space to the Virginia Outdoors Foundation or to another entity acceptable to the County of Loudoun. This dedication will be made with certain reservations to include areas for the roadway, water lines, berms, fencing, etc. as shown on a "Goose Creek Scenic Easement exhibit" drawn by Dewberry & Davis and dated August 7, 1990 and revised August 29, 1990.
6. Trail Easement Along Goose Creek: At such time that an off-site trail is constructed to connect to the northern or southern boundary of the tunnel area, the Applicant shall dedicate to the County, at no cost to the County, a fourteen (14) foot wide public access easement within the "300' NO BUILD BUFFER" as labeled and delineated on the SPEX Plat. Such easement shall be field located by Loudoun County Parks, Recreation and Community Services (PRCS) Staff in coordination with the Applicant.
7. Lighting: All exterior lighting, including security lighting, shall be designed and installed to minimize light trespass and the visibility of lighting from properties offsite of the Property. Exterior light fixtures shall be full cut-off and fully shielded and shall direct light downwards and into the interior of the Property and away from surrounding public roads and properties.
8. Blasting: No bulk blasting materials shall be stored on the subject Property. Tunnel blasting operations will be limited to Mondays through Fridays between the hours of 8:00 a.m. and 5:00 p.m., except in the case when a blasting charge has been set before 5:00 p.m. and is then delayed. In such a case, the Applicant may then complete the blast after 5:00 p.m., but no later than 30 minutes after sunset.
9. Fugitive Dust: Fugitive dust shall be suppressed by use of water spraying activities. No oil-based products shall be used for suppression of fugitive dust.
10. Wood Turtles: If any wood turtles are found during quarry development, the Applicant shall notify all contractors working on the Subject Property about the

potential to encounter wood turtles and to undertake a “sweep” of potential habitat areas prior to initiation of construction. The Applicant will also distribute a flyer prepared by the Virginia Department of Game and Inland Fisheries that includes photos and a description of wood turtles that is distributed to all site workers. Any wood turtles located during such a sweep will be relocated to a suitable area along Sycolin Creek or Goose Creek. Additionally, The Applicant will comply with all federal, state, and local laws governing endangered species. Upon determination by the appropriate federal or state authority that rare species/communities exist, the Applicant will evaluate the portion of the site not impacted by mining as a possible mitigation area prior to disturbance. The Applicant shall instruct contractors to use bridge spans or bottomless culverts to prevent barriers of migration.

11. Federal and State Permits: If violations of any state or federal permits are Reported to Loudoun County by the applicable regulatory agency, the Board of Supervisors, and/or the County Administrator, may request the Applicant to provide, at the Applicant's sole expense, the services of an appropriate firm to review the nature of the violation, if any, and the remedy, if any. This firm shall be jointly selected by the Applicant and Loudoun County and will Report solely to Loudoun County.
12. Future Recreational Amenity: Following cessation of quarrying activities within this area the Applicant shall coordinate with Loudoun Water and the Department of Parks, Recreation, and Community Services to create a public recreational amenity for the quarry areas.
13. Berms and Buffers In compliance with regulations set forth by the Virginia Department of Mines, Minerals, and Energy (DMME), the Applicant shall ensure that Berms/Buffers as shown on the Plat, are seeded or landscaped to protect against erosion.
14. Erosion and Sediment Control The Applicant shall conform with the approved DMME erosion and sediment control plans for the duration of quarrying and related operations on the Property, and shall provide a copy of all approved DMME erosion and sediment control plans to the County. If any part of the Property is not governed by DMME erosion and sediment controls, the Applicant shall provide to the County for review and approval erosion and sediment control plans in accordance with local regulations and the Virginia Erosion and Sediment Control Handbook (VESCH).
15. Wetlands The Applicant shall, in advance of any disturbance of regulated wetlands on the Property, conduct evaluations, provide delineations, and obtain permits as required by the County, the Virginia Department of Environmental Quality (DEQ), or the Army Corps of Engineers. Should wetlands mitigation be required by any of these entities, the Applicant shall make it a priority to provide such mitigation within the Goose Creek watershed within Loudoun County, and, if it is determined by the Applicant that this is not feasible, then elsewhere within the Commonwealth.

16. Wells and Septic Tanks: The Applicant shall properly document any existing well or septic system that is to remain on the Property, and shall ensure that any well or septic system that is to remain on the Property is approved by the County. The Applicant shall properly abandon all wells and septic tanks associated with a dwelling unit on the Property at such time as the associated dwelling is razed, pursuant to requirements of the County and Virginia Department of Health.
17. Underground Storage Tanks: The Applicant shall abandon, in accordance with all applicable federal, state, and local requirements, all aboveground and underground fuel storage tanks, supply wells, and septic systems that are not necessary for either quarry operations or for residences on the property that remain in use.
18. Permits: The Applicant shall obtain all necessary federal, state, and local permits for mining operations, including the Virginia Department of Environmental Quality Air Permit and General Water Permit, and a Virginia Pollution Discharge Elimination System (VPDES) Storm Water Permit.
19. Tree Conservation Plan: Prior to each phase of quarrying activity, the Applicant shall submit a tree conservation plan to the County for review and approval. Each plan shall address the areas shown on the Plat that will be impacted by each respective phase of the quarrying activity. The Applicant shall comply with each tree conservation plan for the Property, as approved by the County.
20. Entrances: All trucks designed to haul stone shall both enter and exit the Property by way of either Existing Old Route 659 (Gum Spring Road) at the existing entrance as shown on the Plat.
21. New Quarry Operator: SPEX 2009-0027 shall automatically terminate if operation of the stone quarry on the Property is transferred to a new quarry operator (hereinafter, the "transferee") that has not been deemed acceptable by the Board of Supervisors. A transferee may continue to operate under SPEX 2009-0027 if, prior to the transfer, a transferee is determined by the Board of Supervisors to be an acceptable operator of the stone quarry located on the Property. A determination of a transferee's acceptability shall be initiated by a written request from the Applicant to the Board of Supervisors. Upon receipt by the Board of Supervisors of a written request by the Applicant and required supporting documentation deemed complete by the Board of Supervisors, the Board shall have 120 days to review the request and issue a determination as to the acceptability of a transferee. Supporting documentation to be considered by the Board shall include: (i) a financial Report that demonstrates a transferee's financial ability to comply with all applicable rules and regulations, (ii) a letter from the state agency responsible for the regulation of stone quarries of each state in which a transferee owns or operates a stone quarry facility, if any, indicating whether a transferee is in compliance with all applicable state rules and regulations, (iii) a list of each locality in which a transferee owns or operates a stone quarry, if any, and (iv) any other relevant documentation deemed necessary to a complete review by the Board, as determined by the Zoning

Administrator. This 120-day review by the Board of Supervisors is not intended to constitute a new Special Exception application, and approval of a transferee shall not be unreasonably withheld.

22. Stormwater Management. Post-construction stormwater management shall prevent the post-development peak discharge rate and volume from exceeding the pre-development peak discharge rate and volume for the 1- and 2- year, 24-hour design storms.
23. Erosion and Sediment Control and Turbidity Management. In addition to the minimum requirements for erosion and sediment control in Chapter 1220 of the Codified Ordinance and the Virginia Erosion and Sediment Control Handbook, the Applicant shall provide the following heightened erosion and sediment control measure specified in the FSM for Reservoir Protection Requirements: The use of stabilization matting shall be expanded to aid in the establishment of vegetation.
24. Initial Emergency Services Contribution. At time of issuance of zoning permits for the quarry use on the Property, the Applicant shall make a one-time contribution of Five Hundred Dollars (\$500) per acre of land proposed for Quarry uses, as shown on the Concept Plan, exclusive of any lands proposed for berms, buffers, and open space. All such cash contributions shall be payable to the County, for equal distribution by the County to the primary volunteer fire and rescue companies providing service to the Property. Said contribution shall escalate on a yearly basis from the base year of 1988 and changing effective each January 1 thereafter based on the Consumer Price Index prepared by the Department of Labor, Bureau of Labor Statistics (hereinafter, CPI) and shall be divided equally between the primary servicing fire and rescue companies. As determined by the primary servicing fire and rescue companies, the Applicant may provide delivery of crushed stone in lieu of cash contributions. Should the crushed stone contribution option be chosen, the Applicant shall provide this stone at a value of 90% of Luck Stone's standard market price, existing on the date of stone delivery.

## **DRAFT PROFFER STATEMENTS**

**August 26 and 27, 2010**

ZMAP 2009-0003 and ZMAP 2009-0004 continue under revision and review. See Attachments 274 and 164 respectively.

## V. PROJECT REVIEW

### A. CONTEXT

#### Background

Luck Stone Corporation of Richmond, Virginia (hereinafter, "Luck Stone"), is the owner and operator of a series of stone quarries in Loudoun County, including the existing "Leesburg Plant" quarry operation located in Loudoun County along Route 659 on the east side of Goose Creek (MCPI #152-39-5797), which it has operated since 1971 (see *Illustration 1*). The Leesburg Plant consists of Quarries "A" and "B," which are located north and south of the Washington & Old Dominion Trail, respectively and connected by an existing tunnel. Luck Stone also holds approvals under SPEX 1990-0019, ZMAP 1999-0004, and SPEX 1999-0006 for the eventual extension of the Leesburg Plant operation west of Goose Creek (known as future Quarry "D") on 198.1 acres located between two parcels, MCPI #151-37-7403 and 151-16-0598. Luck Stone plans to commence extractive quarrying activities on Quarry D within three to five years.

Loudoun Water currently provides water within an area identified by Loudoun County as the Central Water Supply System, which equates to the area encompassed by the Suburban and Transition Policy Areas. Loudoun Water currently obtains about 57 million gallons of water per day (MGD) from Fairfax Water (Fairfax County) and the City of Fairfax. Fairfax Water draws water from both the Potomac River and the Occoquan Reservoir. The City of Fairfax draws water from the Goose Creek Reservoir. Based on projected water supply demand, Loudoun Water estimates that 90 MGD will be needed to support the future water needs of the Central Water Supply System (2035-2030).

On December 11, 2008, the Loudoun Water Board of Directors approved the Potomac River Water Supply and Raw Water Storage Program ("Central Water Supply Program"). The Central Water Supply Program is a two-phased program to meet current and projected needs for the next 30 years and consists of several components: (1) a raw water intake, which was approved as part of the River Creek rezoning (ZMAP 1989-0015); (2) a by-right pump station at the Potomac River; (3) a water treatment plant, and (4) raw water storage in Luck Stone quarries, which the Board approved on April 12, 2010 (SPEX 2009-0020, SPEX 2009-0033, and CMPT 2009-0006).

#### Request

Luck Stone and Loudoun Water are requesting rezoning approval of a combined 472 acres from TR-10, JLMA-20 and PD-GI to MR-HI and PD-GI.

Luck Stone is also requesting a Special Exception, SPEX 2009-0027, to extend Quarry D south from the existing Quarry D to the Loudoun Water's proposed Water Treatment Plant location as shown in pending SPEX 2009-0021.

#### Surrounding Properties and Companion Applications

Luck Stone Corporation owns the parcels to the north and east of the subject properties. The subject properties are bounded to the east by the Goose Creek and on the west by the approximately 450 acre Philip A. Bolen Memorial Park.

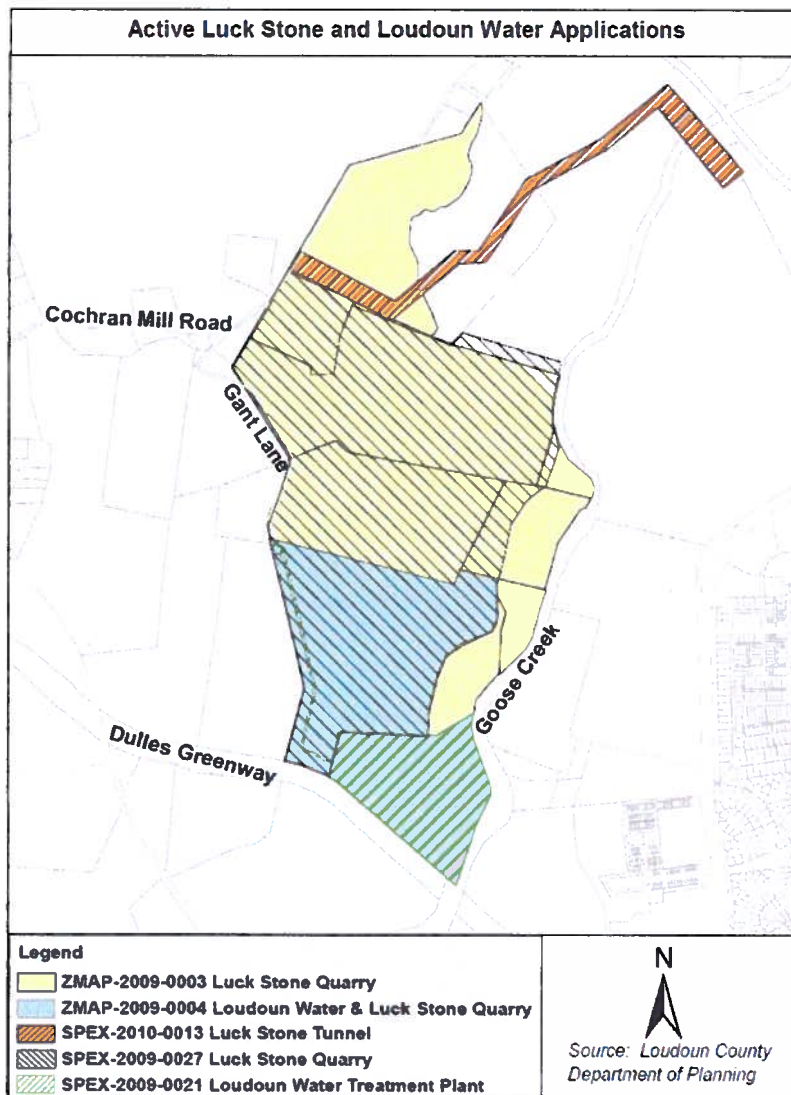
Luck Stone is seeking approval of SPEX 2009-0027, for expansion of the approved Quarry "D" south of this proposal and Loudoun Water with SPEX 2009-0021 is seeking approval for a water treatment plant to the south of the Luck Stone Quarry Special Exception.

Surrounding properties are the subject of recently approved or active rezoning applications. The Board recently approved Green Energy Partners/Stonewall Hybrid Energy Park (ZMAP 2009-0005), rezoning 101 acres from TR-10 (Transitional Residential - 10) and JMLA-20 (Joint Land Management Area - 20) to PD-GI (Planned Development - General Industry) for the purpose of developing a utility generating plant and transmission facility. The property south of the hybrid energy park and west of the subject site is the active Stonewall Secure Business Park (ZMAP 2008-0017) application, a request to rezone 193.97 acres from TR-10 to PD-GI. Luck Stone Corporation owns the properties to the north, which are the subject of an active rezoning application (ZMAP 2009-0003, Luck Stone Quarry) to remap five (5) parcels and a portion of two (2) other parcels, totaling 303.7 acres, from TR-10, PD-GI, and JLMA-20, to MR-HI (Mineral Resource – Heavy Industry) for the purpose of expanding Luck Stone's quarrying operations.

#### Existing Conditions and Goose Creek

The Green Infrastructure is a collection of natural, cultural, heritage, environmental, protected, passive and active resources that will be integrated in a related system. Significant elements of the Countywide Green Infrastructure that can be found on the subject site, include the river and stream corridor resources of Goose Creek and Sycolin Creek, forest resources, steep slopes, diabase rock, and plant and wildlife habitat. The County uses integrated management strategies for the Green Infrastructure to ensure that all land use planning and development respect and preserves the holistic nature of the elements of the Green Infrastructure.

The subject site is located within the Goose Creek watershed and contains significant river and stream resources associated with Goose Creek. Goose Creek in Loudoun County is designated as a "Scenic River" by the Commonwealth of Virginia and is further protected by Plan policy which calls for the establishment of a 300-foot no-build buffer.



### Existing Road Network

The sites can be accessed from Gant Lane (Route 652) via Cochran Mill Road (Route 653); both are public roads. Gant Lane currently terminates in a turn-around at the gated entrance to the water treatment plant site, approximately 0.6 miles south of Cochran Mill Road. Gant Lane is unpaved with a variable width of 10 to 12 feet, and includes an 11-foot wide concrete bridge with no guard rails crossing over the Sycolin Creek. Based on the latest available VDOT traffic counts (2008), Gant Lane carries 30 average daily vehicle trips.

Cochran Mill Road is a local secondary road that connects Sycolin Road (Route 643) with Russell Branch Parkway (east of Crosstrail Boulevard). Between Sycolin Road (Route 643) and the Washington & Old Dominion (W & OD) Trail, Cochran Mill Road is unimproved and varies from 14 to 16 feet wide. Based on the latest available (2008)



VDOT traffic counts, the road segment between Sycolin Road and Gant Lane carries 280 average daily vehicle trips, while the segment north of Gant Lane carries 390 average daily vehicle trips. From the W&OD Trail north to Russell Branch Parkway, Cochran Mill Road is a paved, four-lane, undivided roadway that transitions to a two-lane, paved facility.

## **B. SUMMARY OF OUTSTANDING ISSUES**

The rezoning proposals are supported by Staff subject to revisions to the draft proffer statements. The draft conditions provided by the Applicant have been reviewed by Staff with comments provided to the Applicant. Revised proffer statements have been provided by the Applicant in this packet but have not been reviewed by Staff. Staff and the Applicants continue to work to clarify the proffer statements. Staff will update the Planning Commission at the public hearing with outstanding issues and the Applicant's revised proffer statements for discussion.

The special exception proposal for quarrying is supported by Staff subject to agreement on the conditions of approval. The draft conditions provided by the Applicant have been reviewed by Staff with comments provided to the Applicant. Additional conditions developed by Staff have been provided to the Applicant for review. Revised conditions have been provided by the Applicant in this packet but have not been reviewed by Staff. Staff and the Applicants continue to work to resolve the conditions. Staff will update the Planning Commission at the public hearing with a list of outstanding issues and proposed conditions for discussion.

## **C. OVERALL ANALYSIS**

### **COMPREHENSIVE PLAN**

The subject sites are governed under the policies outlined in the Revised General Plan, the Countywide Transportation Plan (CTP) as well as the Toll Road Plan (TRP). The subject site is partially located within the Suburban Policy Area and the Lower Sycolin Subarea of the Transition Policy Area.

### **LAND USE**

The land use policies in Chapter 6 for the Suburban Policy Area and Chapter 8 for the Transition Policy Area were used to evaluate the Special Exception application. The environmental features on the subject site were assessed applying the Green Infrastructure policies of Chapter 5 of the Revised General Plan, including the policies pertaining to river and stream corridor resources, forest resources, steep slopes, diabase, and plant and wildlife habitat. The proposed use is more specifically governed under the policies for Mineral Resource Extraction in Chapter 5.

The Transition Policy Area is envisioned to be a distinct planning area that will provide a transition in land development intensity between suburban development in the east and rural development in the west. Developments within the Transition Policy Area should

fully integrate the elements of the Green Infrastructure and establish natural open spaces as a predominant visual feature. The subject property is located within the Lower Sycolin subarea, which the Plan envisions to have a more rural character, with lower residential densities and greater open space requirements, in order to protect the drinking water resource of the Goose Creek Reservoir

The Lower Sycolin sub-area of the Transition Policy Area contains diabase rock which is a non-renewable resource used for the construction of roads and buildings that is only found in limited areas of the County. The County recognizes the importance of this resource and supports the protection of extractive industries like the existing Luck Stone Quarry from incompatible land uses and the encroachment by residential development. County policies support the operation and long-range planning of quarry sites, including setting aside sufficient land for future quarry expansion and the creation of mitigation plans for the sensitive reuse of the quarries after extraction is complete. The proposed use of the subject site for a stone quarrying is consistent with the mineral extractive policies of the Plan and is a logical expansion of the previously approved but undeveloped Quarry D located to the north of the subject site owned by Luck Stone. Quarry D is located within the planned land use boundary for Extractive Industry and is also located within the Transition Policy Area (SPEX 1990-0019, SPEX 1999-0006 & ZMAP 1999-0004). In general Plan policies encourage the continued operation, and in some cases expansion of quarry facilities due to the economic benefits to the County. The proposed use of the subject site for a stone quarry and the expansion of the previously approved Quarry D is supported by the mineral extractive policies of the Plan. The area contains diabase rock which is a non-renewable resource used for the construction of roads and buildings that is found in limited areas of the County. The County recognizes the importance of this resource and supports the protection of extractive industries like the existing Luck Stone Quarry from incompatible land uses and the encroachment by residential development. County policies support the operation and long-range planning of quarry sites, including setting aside sufficient land for future quarry expansion and the creation of mitigation plans for the sensitive reuse of the quarries after extraction is complete such as the proposed future water impoundment associated with Loudoun Water.

The subject site is located between two creeks (Sycolin and Goose) and contains significant environmental features, including stream corridor resources, natural drainageways, existing forest cover, wetlands, diabase, and archeological and historic resources. The Quarry Notification (QN) Overlay District also exists on site. The site is located within Ldn 60 1-mile noise contour of the Leesburg Executive Airport.

Staff had recommended that proffers be developed to restrict the uses on the subject site to "stone quarrying" to ensure compatibility with the surrounding area. The Applicant in response would like to reserve the right to construct an "asphalt mixing plant" and/or "concrete mixing plant" on the subject site in the future. These uses are permitted by-right as "accessory" to an approved quarry use in the Zoning Ordinance, but may be inappropriate on the subject site. The proposed "asphalt mixing plant" and "concrete

mixing plant” like the quarry are considered heavy industrial uses, however the quarry is the only industrial use identified by the Plan which may be located within the Transition Policy Area. Establishment of an “asphalt mixing plant” and/or “concrete mixing plant” on the subject site would require truck traffic to access the subject site from Cochran Mill Road (Route 653) a sub-standard two-lane local secondary road with segments surfaced in either asphalt or gravel. Luck Stone, through previously approved proffers and conditions related to other legislative applications, has restricted its primary access to Belmont Ridge Road (Route 659), a paved two lane major collector, to separate the industrial traffic from non-industrial developments and to address safety concerns. Luck Stone as part of the current application will continue to utilize Belmont Ridge Road (Route 659) as its primary access to truck quarried stone from the subject site. Plan policies do not support the proliferation of heavy industrial uses, such as the proposed “asphalt mixing plant” and/or “concrete mixing plant” further south on Cochran Mill Road within the Transition Policy Area. The proposed “asphalt mixing plant” and/or “concrete mixing plant” may be more appropriately located within areas planned Industrial within the Suburban Policy Area and/or Towns where the road network and these types of heavy industrial uses are envisioned. Limiting the uses within the MR-Hi district remains an issue. Staff continues to support this limitation or requests the Applicant mitigate the impacts of the proposed uses with this rezoning.

Staff finds that the proposed rezoning and special exception for use of the subject site as a quarry conforms to the general land use and mineral extractive policies of the Revised General Plan.

### **RIVER & STREAM CORRIDOR RESOURCES**

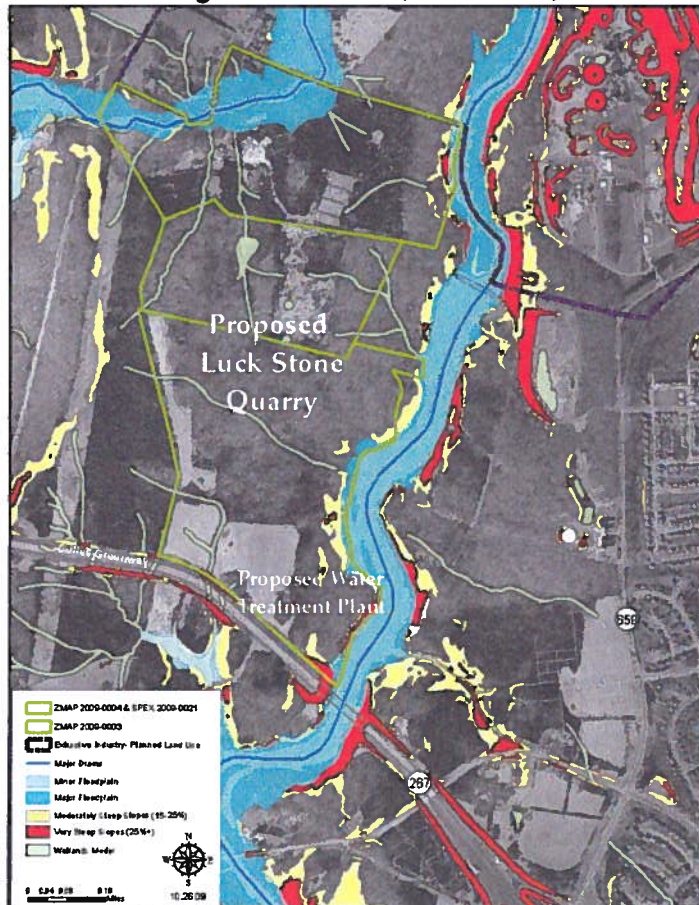
The subject site is located within the Goose Creek watershed and contains significant river and stream resources associated with both Sycolin Creek and Goose Creek. Sycolin Creek is a tributary of Goose Creek, which in turn flows into the Potomac River. A portion of Goose Creek has been impounded just east of the subject property, forming the Goose Creek Reservoir. The subject site also contains major and minor floodplain, ponds, wetlands, riparian vegetation and moderately steep slopes.

The Revised General Plan identifies river and stream corridor resources as significant elements of the Green Infrastructure. The Plan calls for a 50-foot management buffer surrounding 100-year floodplains and adjacent steep slopes in order to protect the stream corridor from upland disturbance and adjacent development. Within the floodplain and 50-foot management buffer, uses are limited to activities that will support and enhance the biological integrity and health of the river and stream corridor, including passive and active recreation, road crossings, pervious paths and trails, and agricultural activities.

### **GOOSE CREEK**

Goose Creek in Loudoun County is designated as a “Scenic River” by the Commonwealth of Virginia and is further protected by Plan policy which calls for the establishment of a 300-foot no-build buffer wherever it exceeds the 50-foot

management buffer. The Plan also recommends the voluntary establishment of a greenbelt along Goose Creek and its reservoir which extends 1,000 feet beyond the 300-foot no-build buffer. The 1,000-foot voluntary greenbelt envisioned by the Plan to surround Goose Creek and its reservoir has not been provided, though a 300-foot no-build buffer has been provided. The submitted Concept Development Plans (CDPs) depict the 300-foot no-build buffer and the individual river and stream corridor resources, which include the floodplain limits, adjacent steep slopes, wetlands and the 50-foot management buffer; however, in several locations these river and stream



corridor elements extend beyond the no-build buffer. In these situations Staff recommends extending the no-build buffer to protect these features to protect the integrity of these river and stream corridor resources and contribute to the 1,000 foot voluntary greenbelt along Goose Creek. Staff is particularly concerned with the proposed development on moderately steep slopes adjacent to the Goose Creek reservoir.

### SYCOLIN CREEK

Sycolin Creek bisects the northwestern boundary of the subject site. The Applicant has included the 50-foot management buffer surrounding Sycolin Creek and has depicted the individual river and stream corridor resources on the CDP. Staff recommended that the Applicant protect the river and

stream corridor resources located outside the 50-foot management buffer associated with Sycolin Creek.

The Applicant's responses to these concerns have been addressed in Attachments 276 and 277. The proffer statements continue under revision and review.

### OPEN SPACE

Within the Transition Policy Area, the Plan envisions that natural open spaces will be the predominant visual feature of the landscape and an enhancement to the area's river and stream corridors. All development within the Transition Policy Area will be clustered with 50 to 70 percent open space and the full implementation of the Green Infrastructure policies. The County envisions that the Lower Sycolin subarea will have a more rural

character with lower densities and higher open space requirements than other subareas to facilitate a transition to the Rural Policy Area. Within the Lower Sycolin subarea, at least 70 percent of the site will be maintained as open space. Staff recommended that the Applicant develop a well-connected open space system comprising 70 percent of the site area, encompassing and enhancing significant elements of the Green Infrastructure, and forming the predominant visual feature of the landscape.

In response the Applicant has stated that given the characteristic of the quarry and the requirements for quarry operations that 70% open space cannot be achieved on the subject site but a significant amount of open space will be delivered at the conclusion of the quarrying activities when the site becomes a reservoir/lake. Luck Stone in their response to referral “envisions that the quarry use will ultimately provide a public amenity”, but are unwilling to commit to its end use at this time since the time horizon for cessation of use is up to 100 years. The submitted “Reclamation Plan” (see discussion below and Attachment 298) lists a number of possible uses for the quarry pit and surrounding property following cessation of this use which include a water reservoir in conjunction with Loudoun Water’s Central Water Supply program, an outdoor recreation area utilizing the lake as a focal point and/or a nature conservancy as possible end uses. All these possible uses could provide significant amounts of open space, however no commitments have been provided by the Applicant (See Attachments 146 and 193 further information regarding the Applicant’s responses and Attachments 164 and 274 for further information regarding the Applicant’s proposed proffers).

Staff recognizes that the reservation of up to 70% open space in association with an operating quarry may be unrealistic and counter to the goals of the mineral extractive policies; however a unique opportunity exists to develop a significant open space amenity on the subject site following cessation of use which will fulfill the open space policies of the Plan. Staff objects to the Applicants claim that it is premature to plan for the final use of the quarry at this time. Plan policies require that an application to permit development of new quarries or expansion of existing quarries include a concept plan for use of the site after extraction is complete (*Revised General Plan, Chapter 5, Mineral Resource Extraction Policies, Policies 9*). Staff recommends that the Applicant commit to the provision of a minimum of 70% open space in conjunction with any adopted concept reclamation plan for the subject site following cessation of the quarry use. (See Attachments 146 and 193 for further information regarding the Applicant’s responses).

It appears that the majority of remaining issues have been addressed; however, Staff has identified several outstanding issues pertaining to permitted accessory uses associated with quarrying activities, the provision of open space, and development of a concept plan for use of the quarry following cessation of use which requires additional information and further evaluation. (See Attachments 146 and 193 for further information regarding the Applicant’s responses).

Staff finds the proposed quarry use and water treatment plant on the subject sites are supported by the land use policies of the Plan. In addition the proposals address considerable environmental concerns which the Applicant seeks to address through conditions and proffers. See Attachments 165, 272, and 282 for further information regarding the Applicant's responses and the Environmental Review portion of this Report for further details.

#### Reclamation Plan and Future Recreational Amenity

The RGP envisions quarry use as a long term but interim district. The Mineral Resource Extraction Policy 9 states that, "An application to permit the development of new quarries or the expansion of existing quarries will include a concept plan for the use of the site after extraction is complete." Staff sought a commitment for future recreational opportunities, within and around the quarry site with the Applicant, before and after quarry construction, such as non-motorized boating, fishing, hiking, and picnicking.

The Applicant stated that with the extended timeframe for exhaustion of the planned quarry (perhaps as long as 100 years from the beginning of extraction), they could not commit to the creation of a public recreational amenity at this time, nor commit as to what recreational opportunities would be appropriate following the end of extraction activities. The Applicant has committed to the reclamation plan required by DMME.

While the reclamation plan required by DMME addresses resoiling and revegetation it does not address the more comprehensive approach to inclusion of a future amenity use. Staff requests that the Applicant commit to a Condition of Approval for the creation of a public recreational amenity in coordination with Loudoun Water and the Department of Parks, Recreation, and Community Services. (See Attachment 298 and the Parks and Recreation Review portion of this Report for further details).

#### ZONING

Luck Stone Corporation and Loudoun Water seek to rezone approximately 148.80 acres from the TR-10 (Transitional Residential-10) zoning district to the MR-HI (Mineral Resource-Heavy Industry) zoning district in order to development a water treatment plant and expand the previously approved Luck Stone quarry with ZMAP 2009-0004.

Luck Stone Corporation also seeks to rezone approximately 323.27 acres from the JLMA-20 (Joint Land Management Area-20), TR-10 (Transitional Residential-10), and PD-GI (Planned Development-General Industry) zoning districts to the MR-HI (Mineral Resource-Heavy Industry) and PD-GI (Planned Development-General Industry) zoning districts in order to expand the previously approved Luck Stone quarry with ZMAP 2009-0003.

Luck Stone also seeks approval for a Special Exception (SPEX 2009-0027) to permit stone quarrying in the proposed MR-HI zoning district.



The companion application, ZMAP 2010-0006, initiated by the Loudoun County Board of Supervisors, would amend the Zoning Map to expand the Quarry Notification (QN) Overlay District to encompass properties or portions of properties currently without such designation that would be located within 3,000 feet of the new quarry area. Generally east, south and west of the existing quarry and QN Overlay District, should ZMAP 2009-0003, ZMAP 2009-0004 and SPEX 2009-0010 be approved.

These applications are subject to the Revised 1993 Zoning Ordinance, and stone quarrying is permitted by Special Exception under Section 3-1004(J), pursuant to Sections 3-1007 and 3-1008. The subject properties are located partially within the FOD (Floodplain Overlay District), partially within the QN (Quarry Notification) Overlay District-Luck Quarry and Luck Note Area, and partially within the AI (Airport Impact) Overlay District, outside of but within one (1) mile of the Ldn 60 aircraft noise contour for the Leesburg Executive Airport.

The MR-HI district permits uses only to the extent they are compatible with resource extraction and contemplated as such in the Comprehensive Plan. Additionally, the Transition Policy Area discusses the importance of extractive industries and the water supply systems, but does not speak to all of the uses permitted in the MR-HI zoning district. Given the policies of the General Plan, the road access proposed, and that this is land currently in the transition zone being transferred to an industrial intensive zone; Staff suggested limiting the list through proffers of permitted and Special Exception MR-HI uses in order to prohibit those that would not be compatible with the transitional zone. Examples of such uses that would require a more intensive transportation and land use include: Warehousing facility; Manufacture, processing, fabrication and/or assembly, distribution of products; motor vehicle storage and impoundment; storage of empty solid waste vehicles and containers, etc. A review of the proffers is necessary to determine resolution of this issue.

A number of other issues cited in the second zoning referral appear to have been adequately addressed on the Applicant's latest resubmission or will be addressed during site plan review.

See Attachments A-147 and 195 for further information regarding the Applicant's responses and Section D addressing rezoning and special exception criteria of this Report for further information.

### **ENVIRONMENTAL REVIEW**

The Revised General Plan identifies the Green Infrastructure as the framework and unifying element that determines where and how development will occur. The SPEX Plat for the quarry addresses the site's Green Infrastructure elements. Proposed development impacts to the Scenic Creek Valley Buffers of Sycolin and Goose Creeks are minimized through the proposed proffers and conditions to provide for the 300 foot no-build buffer, tree save areas, reforestation and restoration of the Sycolin Creek channel and overbank adjacent to the W&OD Trail crossing.



The subject sites are unimproved and bounded to the east by the Goose Creek, a State designated Scenic River, and its reservoir. The eastern portion of the subject property is environmentally sensitive with stream corridor resources, natural drainageways, wetlands, forest cover, moderate and very steep slopes, hydric soils, and habitat. The western portion of the site consists primarily of open fields and forested areas around the Sycolin Creek portion of the northwest corner of the sites. There are smaller areas of hydric soils and very steep slopes throughout the properties. The Dulles Greenway (Route 267) bounds the site to the south (with no direct access). Cochran Mill Road (Route 653) bounds the properties to the west. To the north the existing Quarry D location abuts the proposed quarry special exception area.

Evaluation of the site indicated the presence of wood turtles on or near the project area. The Applicant agreed to a condition requiring a sweep of the area and removal prior to construction activities.

Staff recommended a condition of approval for turbidity testing of runoff leaving erosion and sediment control structures after storm events as provided by surrounding utility uses, most recently Green Energy Partners (SPEX-2009-0009). The Applicant has agreed to meet enhanced stormwater and erosion and sediment control requirements noting the areas involved in clearing and grading are a minimum of 300 feet from Goose Creek. Staff notes the impacts to Sycolin Creek are more immediate and agreed the enhanced erosion and sediment control measures such as super silt fence would provide the protection needed for this area.

A portion of the site is located within Ldn 60 1-mile noise contour of the Leesburg Executive Airport. The proposed tunnel and temporary construction access road will not be impacted by this constraint.

The proposed site layout largely respects the site's environmental features. Development is clustered on the western portion of the site, with minor impacts to wetlands in order to access the site and limited encroachments into the forest cover in the central portion of the site to create an adequate building envelope. A discussion of how the Applicant has specifically addressed the policies of the Revised General Plan (RGP) follows.

#### Goose Creek No-Build Buffer

The Goose Creek is a Scenic River as designated by the Commonwealth of Virginia. The County protects Scenic Rivers by defining a 300-foot no-build buffer (measured from the scar line landward on both sides of the stream). Consistent with the River and Stream Corridor Resources Policies of the RGP, the SPEX Plat depicts the 300 foot wide no-build buffer.

According to the River and Stream Corridor Resources Policies of the RGP, uses within the no-build buffer should be limited to activities that will support and enhance the biological integrity and health of the river and stream corridor. Condition revisions continue to address this concern and to limit the uses within the buffer to sub-surface utilities (underground utility lines that leave the above ground trees and vegetation intact), roads and travelways, pervious trails, forest management, and maintenance of the Goose Creek and its reservoir.

#### Tree Save Area/Reforestation

The site currently contains tree cover concentrated on the eastern portion of the site, including an existing oak hickory tree stand. As shown on the concept development plans, the Applicants have designated most of the forest cover adjacent to Goose Creek within the 300' no build buffer and to Sycolin Creek within the open space area to the northwest as Tree Save Areas. Staff finds that the site layout maximizes the preservation of forest cover and habitat on the site.

#### Wetlands

The County supports the federal goal of no net loss to wetlands. The concept development plan shows that the proposed private road from Gant Lane to the water treatment plant will cross five (5) narrow wetland areas. The Applicant is proposing to provide mitigation for these impacts in accordance with the US Army Corp of Engineers requirements. Staff finds that the proposed wetlands crossings are necessary to provide access to the site, and that the proposed limits of disturbance maximize protection of wetlands.

#### Stormwater Management

Runoff from the subject property will drain to the Goose Creek reservoir. During the referral process, Staff raised concerns regarding potential turbid runoff during construction of the water treatment plant. Staff suggested that, in addition to the minimum requirements for erosion and sediment control in Chapter 1220 of the Codified Ordinance and the Virginia Erosion and Sediment Control Handbook, the Applicant consider several heightened erosion and sediment control measures.

The Applicant did not agree to turbidity testing and treatment of high turbidity during the erosion and sediment control phases or to design all Stormwater Management/Best Management Practice facilities (SWM/BMPs) to treat the first inch of stormwater runoff, as Staff had suggested. However, Staff has recommended and the Applicant is considering heightened erosion and sediment control measures. Revisions to conditions to address this recommendation continue.

#### Trail Along the Goose Creek

Parks, Recreation, and Community Services (PRCS) is developing a system of

interconnected linear parks along the County's stream valley corridors. The subject property and the Luck Stone properties to the north are integral to extending such trail along Goose Creek to connect with established portions of the Potomac Heritage National Scenic Trail and its trailhead downstream at Keep Loudoun Beautiful Park. Staff asked the Applicant to consider dedicating the entire 300-foot no-build buffer to the County for the purpose of a linear public park along Goose Creek. Staff also asked the Applicant to consider constructing a natural trail within the 300-foot no-build buffer and dedicating the trail to the County as a public access easement. For security reasons, the Applicants did not agree to dedicate the no-build buffer to the County or to construct the trail. However, the Applicant agrees to dedicate to the County a 10-foot wide public access easement. Staff seeks the minimum 14 foot width of easement to ensure adequate access for trail uses.

### **HISTORIC/ CULTURAL/ ARCHAEOLOGICAL**

The Heritage Preservation Plan states that the County will protect significant archaeological resources identified during the development process. The Applicant's submission identified four archaeological sites within the rezoning and special exception areas. Due to the lack of diagnostic artifacts and the low number of total artifacts recovered, Staff agrees with the survey that they are not eligible for listing in the National Register of Historic Places and that no further investigation is warranted. See Attachment A-93 for further details.

### **TRANSPORTATION**

#### **Trip Generation Information**

The Applicant's traffic statement provides the existing Luck Stone trips to and from Belmont Ridge Road (Route 659) with 152 AM peak hour, 58 PM peak hour and 1,717 daily vehicle trips. Additionally the traffic statement noted the Luck Stone trips at the proposed new employee/service entrance onto Cochran Mill Road (Route 653) (19 AM peak hour, 19 PM peak hour and 70 daily vehicle trips). The traffic statement also stated that no new trips will be generated by the quarry expansion as it will provide an extension of the design life of the Luck Stone Quarry, not increase traffic.

#### **Future Traffic Volumes and Level-of-Service (LOS)**

The Applicant's supplemental traffic statement provides year 2015 future traffic volumes. The LOS analysis includes a review of the proposed unsignalized new access onto Cochran Mill Road (Route 653) under three scenarios (1) with Loudoun Water traffic only (2) with Luck Stone traffic only and (3) with both. The traffic statement indicates that all of the turning movements will operate at LOS A under each scenario during both peak hours.

#### **Turn Lane Warrants**

As summarized in the traffic statement, and based on right turn volumes, a separate right turn lane or taper is not required at the proposed Cochran Mill Road Luck Stone/Loudoun Water access road intersection.

### Cochran Mill Road and Gant Lane

The Applicant has proposed a new private access road connection between Cochran Mill Road (Route 653) and Gant Lane (Route 652). The connection to Cochran Mill Road would be located approximately 1,000 feet northeast of the Gant Lane intersection. The purpose of the road is to provide permanent access to the water treatment plant and permanent alternative emergency and intermittent service access for Luck Stone.

Construction of this road would involve a new crossing of the Sycolin Creek floodplain. Luck Stone would construct the road on a new alignment between Cochran Mill Road and Gant Lane, crossing the Sycolin Creek floodplain at its narrowest point. Staff supports the private roadway because it would by-pass the existing narrow Gant Lane Road bridge. The Applicant has agreed to a condition of approval requiring this permanent private road to be in place and open to traffic prior to occupancy.

The Applicant has agreed to a condition to dedicate 35' of right of way to Cochran Mill Road along the site frontage. Construction of one half of the ultimate 4 lane undivided right of way along the site frontage was requested by VDOT. However, Staff notes the Applicant does not foresee any increase in trips per day with these proposals as the Luck Stone trips will not increase since all Luck Stone traffic is routed through Belmont Ridge Road (Route 659). There are just 43 additional daily trips to the future water treatment plant. Staff is satisfied the dedication is sufficient to mitigate the traffic impacts to Cochran Mill Road.

Staff requested and the Applicant has agreed to a condition to dedicate 25' of right of way to Cochran Mill Road along the site frontage with Gant Lane. Staff is satisfied the dedication is sufficient to mitigate the traffic impacts to Gant Lane.

### Belmont Ridge Road

Regarding Belmont Ridge Road (Route 659) the Applicant has stated the volume of quarry-related truck traffic is directly tied to market demand and, since the proposed expansion of the quarry use will not increase the intensity of crushed stone production or the sales volume, and considering that market demand will not change as a result of the approval of this application, the quarry expansion will serve only to extend the functional life of the existing Leesburg Plant quarry operation. Accordingly, and as discussed in the Transportation Analysis prepared by Patton, Harris, Rust & Associates, Luck Stone does not foresee additional business activity or any increases in vehicle trips by virtue of approval of ZMAP 2009-0003, ZMAP 2009-0004, or SPEX 2009-0027 over that which has been previously approved.

However, as a two-lane facility without turn lanes, the existing traffic accessing the quarry creates friction on Belmont Ridge Road (Route 659) which impedes through traffic flow. In addition, the potential for rear-end collisions is increased. The CTP calls

for turn lanes at all intersections on Route 659. Staff recommends a condition that right- and left-turn lanes be provided by the Applicant on Route 659 at Luck Lane which meet VDOT standards.

The Applicant has stated installation of separate left turn lanes on Belmont Ridge Road, to satisfy current VDOT design requirements at a 50 mile-per-hour design speed, would require significant turn lane transition lengths which extend south of the entrance off-site. The Applicant has agreed to a condition to construct a right turn lane at the intersection of Luck Lane and Route 659. The Applicant has proposed a reduced speed limit to 35 mph and an advance flashing warning to alert oncoming drivers to this intersection.

The Applicant has offered a condition to dedicate right of way and easements for Belmont Ridge Road for a half-section of the VDOT Belmont Ridge Road Improvement Project. VDOT requested construction of frontage improvements consistent with VDOT's Route 659 Belmont Ridge Road Improvement project. Alternatively a monetary contribution from this Applicant for application towards this project equivalent to the cost of frontage improvements consistent with the VDOT project would be acceptable. Luck Stone notes no additional traffic to Belmont Ridge Road is anticipated with these applications. Review and revision to conditions continues.

The Applicant has offered a condition for design and installation of a traffic signal at the intersection of Luck Lane and Route 659, when warranted by VDOT.

#### **VIRGINIA DEPARTMENT OF MINES, MINERALS, AND ENERGY**

VDMME has no objection to approval of these applications and states the Applicant is in general compliance currently with VDMME regulations.

#### **VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION**

VDCR sought protection of the existing oak-hickory community along Goose Creek with a no build buffer. The Applicant has provided a 300' no build buffer on the plat and within the proffer statement.

VDCR noted concerns regarding specific communities of rare plants located within diabase flatrock areas that would be destroyed with the quarry use. See attachment A-98 for further information.

#### **PARKS AND RECREATION**

Parks, Recreation, and Community Services (PRCS) is developing a system of interconnected linear parks along the County's stream valley corridors and envisions a trail along Goose Creek. The subject properties are integral to extending a trail along Goose Creek to connect with established portions of the Potomac Heritage National Scenic Trail and its trailhead downstream at Keep Loudoun Beautiful Park. Staff asked the Applicant to consider dedicating the entire 300-foot no-build buffer to the County for the purpose of a linear park along Goose Creek. While the Applicant did not agree to

dedicate the no-build buffer to the County or to construct the trail a provision to dedicate to the County a 14-foot wide public access easement within 300 feet of Goose Creek has been proposed within the conditions and proffers. Revisions to the proffers and conditions continue.

Staff also requested the following cessation of quarrying activities within this area the Applicant coordinate with Loudoun Water and the Department of Parks, Recreation, and Community Services to create a public recreational amenity for the quarry areas. Conditions have been proposed and discussions continue. (See Attachment A-88 for further details).

#### **NORTHERN VIRGINIA REGIONAL PARK AUTHORITY (NVRPA)**

The NVRPA has no objection to these applications.

#### **ENVIRONMENTAL HEALTH**

As indicated in the review the Applicant's may have a hand dug well onsite that will need to be properly abandoned. An additional well drilled in 2000 will be too close to the stormwater management pond and will need to be abandoned as will any existing septic tanks found during construction.

#### **FIRE AND RESCUE**

Fire and Rescue Staff has no objection to the approval of this application. However, Staff notes that the Applicant must demonstrate adequate access and circulation of emergency vehicles throughout the site at the time of site plan.

The Leesburg Volunteer Fire and Rescue Company (VF-RC) is identified as the first responder to the subject property, with an approximate response time of 8 minutes and 55 seconds from Station 13 and 10 minutes from Station 20.

Per the adopted Board Fire and Rescue Policy, Applicants are typically asked to provide a one-time monetary contribution to be distributed to the primary volunteer fire and rescue agencies that would respond to emergency situations on the subject property. The Applicant has agreed to a note to provide a contribution, upon a recommendation regarding the amount of that contribution from Fire and Rescue.

#### **GOOSE CREEK SCENIC RIVER ADVISORY BOARD**

The Goose Creek Scenic River Advisory Board has no objection to these applications.

#### **TOWN OF LEESBURG**

The Town of Leesburg indicates that it has no issues with the rezoning petitions and associated special exception request. These lands (located to the west of Sycolin Creek) are within the town's Urban Growth Area and are designated in the Town Plan for future industrial use.

## **COUNTY ATTORNEY**

The County Attorney is in the process of reviewing the draft proffers and conditions of approval submitted as part of the rezonings and special exception applications.

### **D. ZONING ORDINANCE CRITERIA FOR APPROVAL**

#### **Rezoning Criteria for Approval**

*Section 6-1211(E) of the Loudoun County Zoning Ordinance states " ... (i)f the application is for reclassification of property to a different zoning district classification on the Zoning Map, the Planning Commission shall give reasonable consideration to the following matters ... ":*

*Note: The rezoning criteria listed below, unless otherwise stated, apply to ZMAP 2009-0003 and ZMAP 2009-0004 (Luck Stone's and Loudoun Water's requested rezoning to MR-HI). Analysis of criteria relevant to ZMAP 2010-0006 (proposed rezoning initiated by the County to expand the Quarry Notification (QN) Overlay District) is provided where appropriate.*

Standard      *Whether the proposed zoning district classification is consistent with the Comprehensive Plan.*

Analysis      The proposed rezoning is consistent with the land use policies in this part of the County as set forth in the Revised General Plan. The slight encroachment (2% of the subject property) outside of the area planned for extractive industry and into area planned for keynote employment is not significant as the area is encompassed by the triangle of Sycolin Creek, Gant Lane and Cochran Mill Road and largely in floodplain and therefore would serve as an overall effective buffer around the quarry area. Additionally, the County is proposing to expand the Quarry Notification (QN) Overlay District to reflect the new quarry areas, should the Luck Stone applications be approved. The expansion of the QN Overlay District is consistent with policies contained in the Revised General Plan.

Standard      *Whether there are any changed or changing conditions in the area affected that make the proposed rezoning appropriate.*

Analysis      There are limited areas of diabase rock assets in the County, and policies in the Revised General Plan encourage quarrying activities in designated areas. The Applicant operates Quarries A, B and C immediately to the north and east of this site and are already zoned MR-HI; additional adjacent areas include uses such as the recently approved Green Energy Partners/Stonewall Hybrid Energy Park (SPEX 2009-0009 and CMPT 2009-0001) and pending Stonewall Secure Business Park (ZMAP 2008-0017, SPEX 2008-0068 and



SPEX 2008-0069) are already zoned MR-HI. Expansion of the quarry area would necessitate the proposed accompanying expansion in the surrounding Quarry Notification (QN) Overlay District.

Standard      *Whether the range of uses in the proposed zoning district classification is compatible with the uses permitted on other property in the immediate vicinity.*

Analysis      Quarry uses are compatible with the Hybrid Energy Park SPEX 2009-0009 and CMPT 2009-0001) to the west and the proposed Loudoun Water Treatment Plant (SPEX 2009-21 and CMPT 2009—0007) to the south. Properties to the east along the western side of Belmont Ridge Road (Route 659) are largely planned and zoned for industrial uses. Quarrying uses are not similar to those permitted in adjacent residential zoning districts. Quarries are supported by the Revised General Plan, and buffers and the expanded QN Overlay District would serve to mitigate impacts on adjacent properties. Quarry activities are currently permitted by special exception on an immediately adjacent parcel (the existing Quarry D).

Standard      *Whether adequate utility, sewer and water, transportation, school and other facilities exist or can be provided to serve the uses that would be permitted on the property if it were rezoned.*

Analysis      Luck Stone indicates that it would utilize the existing private well and sanitary drainfields for the use of employees on site until such time as public sewer and water would be available. A condition of approval for the related special exception for quarry uses requires that these facilities be approved by the County. Truck traffic to and from the site would continue to use the main entrance at Luck Lane on Belmont Ridge Road (Route 659). There would be no impact on the County's school system.

Standard      *The effect of the proposed rezoning on the County's ground water supply.*

Analysis      As part of its companion special exception application, Luck Stone has submitted a detailed groundwater monitoring plan for the proposed quarry expansion. Staff and Luck Stone have reached agreement on the components of the Monitoring Plan, and consensus has been reached on condition language for mitigation of potential adverse impacts to off site wells and a corrective action plan should impacts occur. The proposed rezoning will not have an effect on the County's ground water supply and any future quarrying use will include a hydrogeologic assessment of the subject property.

Loudoun Water (SPEX 2009-0021) is providing a 400-700 foot buffer between the limits of disturbance and Goose Creek. The remainder of the rezoning area is buffered from Goose Creek a minimum of 300 feet. Sycolin Creek is completely within a proposed open space portion of the rezoning. With minimal impacts to allow for the crossing of the new access to Loudoun Water to the south, and the temporary access road to the proposed tunnel to the east, Sycolin Creek will remain within a largely forested open space. Best Management Practices and Low Impact Development are to be employed to accommodate surface runoff and protect groundwater recharge areas.

Standard      *The effect of the uses allowed by the proposed rezoning on the structural capacity of the soils.*

Analysis      Not applicable. The quarry uses proposed for this area would remove the topsoil and overburden and use it to construct a berm around the quarry pit.

Standard      *The impact that the uses permitted if the property were rezoned will have upon the volume of vehicular and pedestrian traffic and traffic safety in the vicinity and whether the proposed rezoning uses sufficient measures to mitigate the impact of through construction traffic on existing neighborhoods and school areas.*

Analysis      The Applicant is proposing to extend the life of the existing Luck Stone Quarries through expansion of the existing Quarry D. Additional access from adjacent roads is prohibited under SPEX 1990-0019. The access from Belmont Ridge Road (Route 659) is to remain unchanged and the volume of traffic from the quarries is anticipated to remain similar.

Standard      *Whether a reasonably viable economic use of the subject property exists under the current zoning.*

Analysis      The properties are currently zoned TR-10, PD-GI and JLMA-20 and could be used for residential development; however, this would not meet the goals of the Revised General Plan to protect non-renewable resources such as diabase rock.

Standard      *The effect of the proposed rezoning on the environment or natural features, wildlife habitat, vegetation, water quality and air quality.*

Analysis      The expanded quarry pit would maintain the 300 foot no-build buffer to Goose Creek and, as discussed above, Sycolin Creek is

completely within a proposed open space portion of the rezoning. The Applicant is providing significant tree save areas adjacent to Goose Creek, Sycolin Creek and within the Loudoun Water (SPEX 2009-0021) site. Throughout the rezoning area the Applicant has provided 50' management buffers in addition to the Scenic Creek valley buffers. Conditions of approval with the companion special exception applications (SPEX 2009-0027 and SPEX 2010-0013) require Luck Stone to obtain all required state and federal permits, including those related to wildlife habitat, water quality and air quality. Conditions have also been included regarding forest management and tree conservation plans.

Standard      *Whether the proposed rezoning encourages economic development activities in areas designated by the Comprehensive Plan and provides desirable employment and enlarges the tax base.*

Analysis      The proposed use would extract a non-renewable resource, diabase rock, and generate significant tax revenues for the County.

Standard      *Whether the proposed rezoning considers the needs of agriculture, industry, and businesses in future growth.*

Analysis      The proposed rezoning does consider the needs of industrial and commercial business. The crushed stone that would eventually be mined on this site is necessary for various types of construction activities in a growing area and is not amenable to long-distance transportation.

Standard      *Whether the proposed rezoning considers the current and future requirements of the community as to land for various purposes as determined by population and economic studies.*

Analysis      Crushed stone is necessary for many types of construction activities in any region, particularly in a growing jurisdiction such as Loudoun County. There are limited amounts of diabase rock available for this type of crushed stone.

Standard      *Whether the proposed rezoning encourages the conservation of properties and their values and the encouragement of the most appropriate use of land throughout the County.*

Analysis      Diabase rock is a non-renewable resource and is only found in limited portions of the County. This is one such site. With respect to the proposed expansion of the QN Overlay District, property owners and prospective owners are advised of the presence of a nearby quarry

and may make more informed decisions regarding potential land uses.

Standard      *Whether the proposed rezoning considers trends of growth or changes, employment, and economic factors, the need for housing, probable future economic and population growth of the County and the capacity of existing and/or planned public facilities and infrastructure.*

Analysis      As mentioned previously, there is a tremendous need for the products derived from diabase rock in any region, particularly a growing jurisdiction such as Loudoun County.

Standard      *The effect of the proposed rezoning to provide moderate housing by enhancing opportunities for all qualified residents of Loudoun County.*

Analysis      Not applicable.

Standard      *The effect of the rezoning on natural, scenic, archaeological, or historic features of significant importance.*

Analysis      Quarry uses would remain well outside of the Goose Creek and Sycolin Creek floodplain and its protective buffers. A condition of approval on the SPEX application relates to forest management activities throughout the site. A Phase I Archaeological Survey Report has been conducted on the property and no further archaeological work is recommended.

#### **Special Exception Criteria for Approval**

*Section 6-1310 of the Loudoun County Zoning Ordinance states " In considering a Special Exception application, the following factors shall be given reasonable consideration. The Applicant shall address all the following in its statement of justification or Special Exception plat unless not applicable, in addition to any other standards imposed by this Ordinance":*

Standard      *Whether the proposed Special Exception is consistent with the Comprehensive Plan.*

Analysis      As stated in the Community Planning referrals, Revised General Plan land use policies support the expansion of existing quarries under certain conditions; this is an appropriate location for expansion of a stone quarry. Conditions of approval are continuing to be developed in consultation with the Applicant.

- Standard      *Whether the proposed Special Exception will adequately provide for safety from fire hazards and have effective measures of fire control.*
- Analysis      Fire control measures at quarry facilities are required pursuant to Virginia Department Mines, Minerals and Energy regulations, which would issue a permit to the Applicant to operate the quarry. Explosives used on site are handled only by licensed professionals certified by DMME. Explosives on site will be stored in accordance with Federal Explosives law and Regulations. Luck Stone currently holds an explosives storage permit for its existing quarry.
- Standard      *Whether the level and impact of any noise emanating from the site, including that generated by the proposed use, negatively impacts the uses in the immediate area.*
- Analysis      Blasting activities would occur in accordance with applicable performance standards in the Revised 1993 Zoning Ordinance and as required by DMME; the Applicant has also proposed a specific condition of approval regarding blasting which Staff supports.
- Standard      *Whether the glare or light that may be generated by the proposed use negatively impacts uses in the immediate area.*
- Analysis      Light spillage is not anticipated from the proposed quarry use. The Applicant is required to meet all applicable performance standards and requirements in the Revised 1993 Zoning Ordinance, and agrees to a condition of approval to limit the impact of any additional lighting on the property.
- Standard      *Whether the proposed use is compatible with other existing or proposed uses in the neighborhood, and adjacent parcels.*
- Analysis      This use is compatible with the Applicant's existing quarry sites immediately to the north and east. Berms, buffers and distance mitigate the impact on adjacent and nearby properties. Conditions of approval limit blasting to certain hours and regulate noise, lighting, and dust control. State DEQ and DMME regulations would also apply. The QN Overlay District advises nearby property owners and prospective buyers of the presence of a nearby quarry.
- Standard      *Whether sufficient existing or proposed landscaping, screening and buffering on the site and in the neighborhood to adequately screen surrounding uses.*

ZMAP 2009-0003, ZMAP 2009-0004, ZMAP 2010-0006, and SPEX 2009-0027  
LUCK STONE AND LOUDOUN WATER  
Planning Commission Public Hearing  
October 27, 2010

- Analysis** Landscaped berms are proposed to surround the quarry pit and accessory uses. A large portion at the northwest end of the site would be retained as open space, and an area south of Sycolin Creek and west of the quarry would serve as an area for overburden placement.
- Standard** *Whether the proposed Special Exception will result in the preservation of any topographic or physical, natural, scenic, archaeological or historic feature of significant importance.*
- Analysis** Conditions of approval regarding forest management and groundwater are included. A Phase I Cultural Resources Survey has been completed, with no additional work is recommended.
- Standard** *Whether the proposed Special Exception will damage existing animal habitat, vegetation, water quality (including groundwater) or air quality.*
- Analysis** The expanded quarry pit would be no closer than approximately 300 feet to Goose Creek, and all riparian vegetation within 300 feet of Goose Creek would remain undisturbed. Conditions of approval with the companion special exception application require Luck Stone to obtain all required state and federal permits, including those related to wildlife habitat, water quality and air quality. Regarding groundwater, Luck Stone has submitted a detailed groundwater monitoring plan for the proposed quarry expansion.
- Standard** *Whether the proposed Special Exception at the specified location will contribute to or promote the welfare or convenience of the public.*
- Analysis** This proposal would make available significant amounts of diabase rock for use in various types of construction projects.
- Standard** *Whether the traffic expected to be generated by the proposed use will be adequately and safely served by roads, pedestrian connections and other transportation services.*
- Analysis** Traffic is not anticipated to increase significantly as a direct result of this application, but Luck Stone cannot rule out additional vehicular trips as a result of market forces and demand for its product. The Applicant is proposing to extend the life of the existing Luck Stone Quarries through expansion of the existing Quarry D. Additional access from adjacent roads is prohibited under SPEX 1990-0019. The access from Belmont Ridge Road (Route 659) is to remain

unchanged and the volume of traffic from the quarries is anticipated to remain similar.

Standard      *Whether, in the case of existing structures proposed to be converted to uses requiring a Special Exception, the structures meet all code requirements of Loudoun County.*

Analysis      Not applicable.

Standard      *Whether the proposed Special Exception will be served adequately by essential public facilities and services.*

Analysis      Fire and rescue facilities are located approximately five (5) miles west of the site. There would be no impact on the County's school system. The site would utilize on site wells and drainfields.

Standard      *The effect of the proposed Special Exception on groundwater supply.*

Analysis      Luck Stone has submitted a detailed monitoring plan regarding potential impacts to groundwater and surface water. Staff concurs with this plan and other related Reports.

Standard      *Whether the proposed use will affect the structural capacity of the soils.*

Analysis      Not applicable. The quarry uses proposed for this area would remove the topsoil and overburden and use it to construct a berm around the quarry pit.

Standard      *Whether the proposed use will negatively impact orderly and safe road development and transportation.*

Analysis      The Applicant is proposing to extend the life of the existing Luck Stone Quarries through expansion of the existing Quarry D. Additional access from adjacent roads is prohibited under SPEX 1990-0019. The access from Belmont Ridge Road (Route 659) is to remain unchanged and the volume of traffic from the quarries is anticipated to remain similar.

Standard      *Whether the proposed Special Exception use will provide desirable employment and enlarge the tax base by encouraging economic development activities consistent with the Comprehensive Plan.*

- Analysis The proposed use would extract a non-renewable resource, diabase rock, and generate significant tax revenues for the County.
- Standard *Whether the proposed Special Exception considers the needs of agriculture, industry, and businesses in future growth.*
- Analysis The crushed stone that would eventually be mined on this site is necessary for various types of construction activities in a growing area and is not amenable to long-distance transportation.
- Standard *Whether adequate on and off-site infrastructure is available.*
- Analysis The Applicant indicates that it would utilize the existing private well and sanitary drainfields for the use of employees on site until such time as public sewer and water would be available. A condition of approval for the related special exception for quarry uses requires that these facilities be approved by the County. Truck traffic to and from the site would continue to use the main entrance at Luck Lane on Belmont Ridge Road (Route 659). There would be no impact on the County's school system.
- Standard *Any anticipated odors which may be generated by the uses on site, and which may negatively impact adjacent uses.*
- Analysis None anticipated, other than a temporary organic smell during the overburden removal process.
- Standard *Whether the proposed Special Exception uses sufficient measure to mitigate the impact of construction traffic on existing neighborhoods and school areas.*
- Analysis Construction traffic would not impact nearby existing or developing neighborhoods. All construction traffic will utilize Route 659. There are no schools in the vicinity of the project.



ZMAP 2009-0003, ZMAP 2009-0004, ZMAP 2010-0006, and SPEX 2009-0027  
**LUCK STONE AND LOUDOUN WATER**  
 Planning Commission Public Hearing  
 October 27, 2010

| <b>VI. ATTACHMENTS</b>   |                       | <b>PAGE #</b> |
|--|-----------------------|---------------|
| <b>1. Review Agency Comments</b>   | <b>Referral Dates</b> |               |
| a. Comprehensive Planning  | 07/12/10; 11/25/09    | A-01          |
| b. Zoning  | 07/15/10; 12/17/09    | A-27          |
| c. Environmental Review  | 07/12/10              | A-38          |
| d. Office of Transportation Services   | 07/22/10              | A-49          |
| e. Virginia Department of Transportation   | 06/14/10              | A-83          |
| f. Fire and Rescue   | 11/02/09              | A-85          |
| g. Environmental Health  | 09/24/09              | A-86          |
| h. Parks, Recreation and Community Services  | 07/15/10              | A-88          |
| i. Community Information and Outreach  | 10/27/09              | A-93          |
| j. Goose Creek Scenic River Advisory Committee   | 05/14/10              | A-97          |
| k. Virginia Department of Conservation and Recreation  | 06/09/10              | A-98          |
| l. Town of Leesburg  | 06/10/10              | A-100         |
| m. Loudoun Water   | 06/10/10              | A-102         |
| n. Virginia Department of Mines, Minerals, and Energy  | 09/11/09              | A-103         |
| o. Condition and Proffer Review  | 09/23/10              | A-104         |
| <b>2. Reaffirmation of Disclosure of Real Parties in Interest Affidavit</b>  | Signed 09/20/10       | A-127         |
| <b>3. Applicant's Response to Referral Comments ZMAP 2009-0004</b>   | 08/26/10              | A-146         |
| <b>4. Applicant's Proffer Statement ZMAP 2009-0004</b>   | Revised 08/26/10      | A-164         |
| <b>5. Applicant's Statement of Justification ZMAP 2009-0004</b>  | Revised 08/26/10      | A-169         |
| <b>6. Applicant's Response to Referral Comments ZMAP 2009-0003 &amp; SPEX 2009-0027</b>  | 08/27/10              | A-193         |
| <b>7. Applicant's Statement of Justification ZMAP 2009-0003</b>  | 08/27/10              | A-239         |
| <b>8. Applicant's Statement of Justification SPEX 2009-0027</b>  | 08/27/10              | A-260         |
| <b>9. Applicant's Proffer Statement ZMAP 2009-0003</b>   | Revised 08/27/10      | A-274         |
| <b>10. Applicant's Proposed Conditions of Approval for SPEX 2009-0027</b>  | 08/27/10              | A-282         |
| <b>11. Applicant's Conceptual Description of Proposed Operation &amp; Evaluation of Feasibility of Operations Without Hazards or Damage to Other Properties SPEX 2009-0027</b> | 08/27/10              | A-295         |
| <b>12. Applicant's Reclamation Plan for SPEX 2009-0027</b>   | 08/27/10              | A-298         |
| <b>13. Rezoning and Special Exception Plats</b>  | Revised 10/06/10      | Attached      |